# SERVICE 1115 MANUAL 2201



### made red milz

# TABLE OF CONTENTS

SECTION																		P	٩GE
Introduction · · · · · · · · · · · · · · · · · · ·												•		•					1
P.W. Board · · · · · · · · · · · · · · · · · · ·			٠.				 •								 •		 		1
Test Equipment Required for Servicing				•		 •			 •	٠.	٠			•			 		2
AM Alignment Procedures · · · · · · · · ·		٠.				 •						•	٠.						2
FM Alignment Procedures																			
Stereo Separation Alignment Procedures																			3
Muting Circuit Alignment Procedures .																			
Dolby FM Tape Output Setting																			
Audio Adjustment																			
Automatic Voltage Regulator Adjustmen																			
Parts List																			
Technical Specifications																			
Servicing Information for European Mode	el															 	 3	39	~45

# LIST OF ILLUSTRATIONS

FIG	
1.	Dial Stringing 1
2.	Front Panel Adjustment and Component Locations
3.	Main Chassis Component Locations (Ton View)
4.	Dear Devel India and Component Locations
5.	Main Charge Component Locations (Rottom View)
6.	P100 Circuit Diagram
7.	EM Eront End Board D100 Component Assembly Diagram
8.	P150 Circuit Diagram 8
9.	AM Tunor Roard - P150 Component Assembly Diagram 8
10.	P200 Circuit Diagram · · · · · · · · · · · · · · · · · · ·
11.	EM LE and Detector Roard — P200 Component Assembly Diagram
12.	P300 Circuit Diagram · · · · · · · · · · · · · · · · · · ·
13.	EM Multipley and Muting Roard — P300 Component Assembly Diagram
14.	PC01 Circuit Diagram
15.	Dolby Lavel Roard PC01 Component Assembly Diagram
16.	PHO1 Circuit Diagram
17.	Antenna Muting Board — PU01 Component Assembly Diagram
18.	PV01 Circuit Diagram
19.	Eupation Lamp Roard PV01 Component Assembly Diagram
20.	P701 Circuit Diagram
21.	Dial Lamp Board P701 Component Assembly Diagram
22.	PH01 Circuit Diagram · · · · · · · · · · · · · · · · · · ·
23.	Dolby FM Monitor Mono and Hi Filter Switch Board — PH01 Component
Come (Apr 18	Accomply Diagram
24.	PT01 Circuit Diagram 12
25.	Loudness FM Muting Main and Remote Speaker Switch Board — PT01
۵٠.	Component Assambly Diagram
26.	P400 Circuit Diagram · · · · · · · · · · · · · · · · · · ·
27.	Phono Amplifier Board — P400 Component Assembly Diagram
28.	PE01 Circuit Diagram
29.	Pre and Tone Amplifier Board — PE01 Component Assembly Diagram
30.	P700 Circuit Diagram
31.	Main Amplifier Board — P700 Component Assembly Diagram · · · · · · · · · · · · · · · · · · ·
32.	P800 Circuit Diagram
33.	Power Supply Board — P800 Component Assembly Diagram · · · · · · · · · · · · · · · · · · ·
34.	Exploded Mechanical Diagram · · · · · · · · · · · · · · · · · · ·
35.	Schematic Diagram
36.	Circuit Diagram
37.	Rlock Diagram
38.	Packing
39.	PR01 Circuit Diagram
40.	Fuse Board — PRO1 Component Assembly Diagram
41.	Rear Panel lacks and Component Locations
42.	Main Chassis Component Locations (Rottom View)
43.	Voltage Conversion Chart
44.	Circuit Diagram · · · · · · · · · · · · · · · · · · ·
myrmit.	On our Diagram
TAB	I F PAGE
1.AD	Test Equipment Required for Servicing 2
	rest Equipment frequired for cervicing

### Heren Hoen Hally.

### INTRODUCTION

This service manual was prepared for use by Authorized Warranty Stations and contains service information for Marantz Model 2235 Stereophonic Receiver.

Servicing information and voltage data included in this manual are intended for use by the knowledgeable and experienced technician only. All instruction should be read carefully. No attempt should be made to proceed without a good understanding of the operation in the receiver.

The parts list furnishes information by which replacement part may be ordered from the Marantz Company. A simple description is included for parts which can be usually be obtained through local suppliers.

### 1. P.W. BOARD

As can be seen from the circuit diagram, the chassis of Model 2235 consists of following units. Each unit mounted on a printed circuit board is described within the square enclosed by a bold dotted line on the circuit diagram.

2010	action file on the or out alagram.	
1.	FM Front End	0
2.	AM Tuner	0
3.	FM IF Amplifier mounted on P.W. Board, P200	0
4.	MPX Stereo Decorder mounted on P.W. Board, P300	0
5.	Dolby Level	1
6.	Antenna Muting	1
7.	Function Lamp	1
	Dial Lamp	
9.	Dolby FM, Monitor, Mono and Hi Filter Switch mounted on P.W. Board PHO	1
10.	Loudness, FM Muting, Main and Remote Speaker Switch mounted on P.W. Board, PTO	1
11.	Phono Amplifier	)
12.	Pre and Tone Amplifier	1
13.	Main Amplifier	Э
14.	Power Supply	)

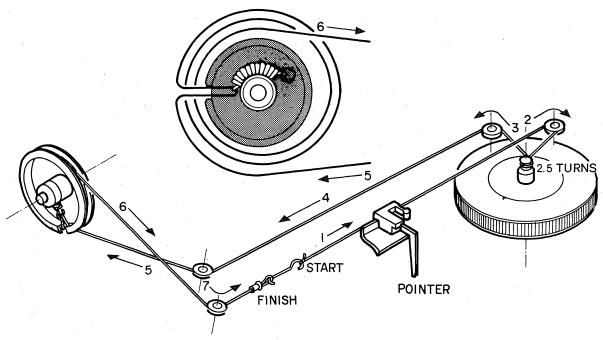


Figure 1. Dial Stringing

### 2. TEST EQUIPMENT REQUIRED FOR SERVICING

Table 1 lists the test equipment required for servicing the Model 2235 Receiver.

Table 1. Test Equipment Required for Servicing

Item	Manufacturer and Model No.	Use							
AM Signal Generator		Signal source for AM alignment.							
Test Loop		Used with AM Signal generator.							
FM Signal Generator	Less than 0.3% distortion	Signal source for FM alignment.							
Stereo Modulator	Less than 0.3% distortion	Stereo separation alignment and trouble shooting.							
Frequency Counter		MPX Oscillator adjustment (VCO).							
Audio Oscillator	Weston Model CVO-100P, less than 0.02% residual distortion is required.	Sinewave and squarewave signal source.							
Oscilloscope	High sensitivity with DC horizontal and vertical amplifiers.	Waveform analysis and trouble shooting and ASO alignment.							
VTVM	With AC, DC, RF range	Voltage measurements.							
Circuit Tester		Trouble shooting.							
AC Wattmeter	Simpson, Model 380	Monitors primary power to Amplifier.							
AC Ammeter	Commercial Grade (1-10A)	Monitors amplifier output under short circuit condition.							
Line Voltmeter	Commercial Grade (0-150V AC)	Monitors voltage of primary power to amplifier.							
Variable Autotransformer (0-140V AC, 10 amps)	Powerstat, Model 116B	Adjusts level of primary power to amplifier.							
Shorting Plug	Use phono plug with 600 ohm across center pin and shell.	Shorts amplifier input to eliminate noise pickup.							
Output Load (8 ohms, ±1% 100W)	Commercial Grade	Provides 8-ohm load for amplifier output termination.							
Output Load (4 ohms, ±1% 100W)	Commercial Grade	Provides 4-ohm load for amplifier output termination.							

### 3. AM ALIGNMENT PROCEDURES

### 3.1 AM IF Alignment

- 1. Connect a sweep generator to the J153 and an alignment scope to the test point R167 (outside).
- 2. Rotate each core of IF transformer L153 for maximum height and flat top symmetrical response.

### 3.2 AM Frequency Range and Tracking Alignment

- 1. Set AM signal generator to 515kHz. Turn the tuning capacitor fully closed (place the tuning pointer at the low end) and adjust the oscillator coil L152 for maximum audio output.
- 2. Set the signal generator to 1650kHz. Place the tuning pointer in the high frequency end and adjust the oscillator trimmer on the oscillator tuning capacitor for maximum audio output.



- 3. Repeat the steps 1 and 2 until no further adjustment is necessary.
- 4. Set the generator to 600kHz and tune the receiver to the same frequency and adjust a slug core of AM ferrite rod antenna and RF coil L151 for maximum output.
- 5. Set the generator to 1400kHz and tune the receiver to the same frequency and adjust both trimming capacitors of antenna and RF tuned circuit for maximum output.
- 6. Repeat the steps 4 and 5 until no further adjustment is necessary.

Note: During tracking alignment reduce the signal generator output as necessary to avoid AGC action.

### 3.3 AM Signal Strength Meter Adjustment

Set the AM Signal generator to 1000kHz with  $5K\mu V$ , and adjust R178 so that the signal strength meter may read 80% of the full scale.

### 4. FM ALIGNMENT PROCEDURES

- 1. Connect an FM signal generator to the FM ANTENNA terminals and an oscilloscope and an audio distortion analyzer to the TAPE 1 MONITOR OUT jacks on the rear panel.
- 2. Set the FM SG to 87MHz and provide about 3 to  $5\mu$ V. Place the tuning pointer at the low frequency end by rotating the tuning knob and adjust the core of oscillator coil L104 to obtain maximum audio output.
- 3. Set the FM SG to 109MHz and provide about 3 to  $5\mu$ V output. Rotate the tuning knob and place the tuning pointer at the high frequency end and adjust the trimming capacitor C106 for maximum output.
- 4. Repeat the steps 2 and 3 until no further adjustment is necessary.
- 5. Set the FM SG to 90MHz and tune the receiver to the same frequency. Decrease signal generator output until the audio output level decreases with the decreasing generator output. Adjust the antenna coil L101, RF coils L102 and L103 and IF transformer L106 for minimum audio distortion.
- 6. Set the FM SG to 106 MHz and tune the receiver to the same frequency. Adjust the trimming capacitor C102, C104 and C105 for minimum distortion.
- 7. Repeat the steps 5 and 6 until no further adjustment is necessary.
- 8. Adjust the secondary core (upper) of discriminator transformer L201 so that the center tuning meter pointer indicates its center at no signal applied. Set the FM SG to 98MHz and increase its output level to  $1K\mu V$  and tune the receiver to the same frequency so that the center tuning meter pointer indicates its center. Adjust the primary core (lower) of L201 for minimum distortion.
- 9. Set the FM SG to 98MHz with  $100 \text{K}\mu\text{V}$ , and adjust R374 so that signal strength meter may read 90% of the full scale.

### 5. STEREO SEPARATION ALIGNMENT PROCEDURES

- 1. Set the FM SG to provide  $1K\mu V$  at 98MHz. Tune the receiver to the same frequency so that the center tuning meter pointer indicates its center.
- 2. Turn the FM SG modulation off (with the pilot signal turned off), connect a frequency counter to the test point J310, and adjust R311 so that the frequency counter may precisely read 19kHz.
- 3. Modulate the FM SG with stereo composite signal consisting of only subchannel signal (of course a pilot signal must be included).
- 4. Adjust the trimming resistor R301 for maximum and same separation in both channels.

### 6. MUTING CIRCUIT ALIGNMENT PROCEDURES

1. Connect a VTVM to across the resistor R363 and adjust the resistor R363 until the meter reads 0.75V DC at no signal.

- 2. Set the FM SG to provide  $1K\mu V$  at 98MHz and tune the receiver to the same frequency correctly.
- 3. Turn on MUTING pushswitch. Shift the FM signal generator frequency to plus and minus and note both plus and minus shifted frequencies at which undesirable audio side responses are muted out. Adjust the R363 so that the same shifted frequencies mute the undesirable side response.
- 4. Adjust R362 for proper frequency shift at which the muting circuit operates.

### 7. DOLBY FM TAPE OUTPUT SETTING

- 1. Set the modulation of FM SG to 400Hz, 50% (±37.5kHz Dev.).
- 2. Set the FM SG to provide 1  $K\mu V$  at 98MHz. Tune the receiver to the same frequency so that the center tuning meter pointer indicates its center.
- 3. Turn on DOLBY FM pushswitch. Set the semifixed resistors RC01 and RC02 so that each output of the TAPE OUT jacks R and L become 580mV at VTVM.

### 8. AUDIO ADJUSTMENT

### 8.1 Main Amplifier DC Offset Alignment

Connect a DC voltmeter with 0.5 or 1V range between the SPEAKER terminals and adjust the trimming resistor R713 for "zero" DC output on the meter.

Repeat the same procedure for the other channel.

Note: During this alignment no load should be connected to the SPEAKER terminals.

### 8.2 Idle-Current Adjustment

Connect a VTVM between pins J713 and J717. Next, adjust the trimming resistor R766 for the VTVM reads 8mV DC.

Repeat the same procedure for the other channel.

Note: During this alignment no load should be connected to the speaker terminals.

### 8.3 Main Amplifier DC Offset Re-Alignment

Check the DC offset voltage aligned in the section 8.2 and if any DC output is observed on the DC voltmeter, adjust R713 again for "zero" output.

### 9. AUTOMATIC VOLTAGE REGULATOR ADJUSTMENT

Connect a VTVM to J804 (+) and J805 (-) and adjust R806 until the VTVM reads 35V under no signal condition.



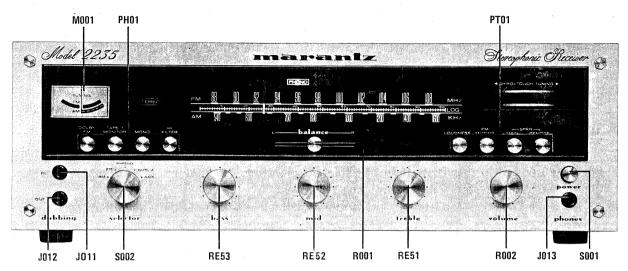


Figure 2. Front Panel Adjustment and Component Locations

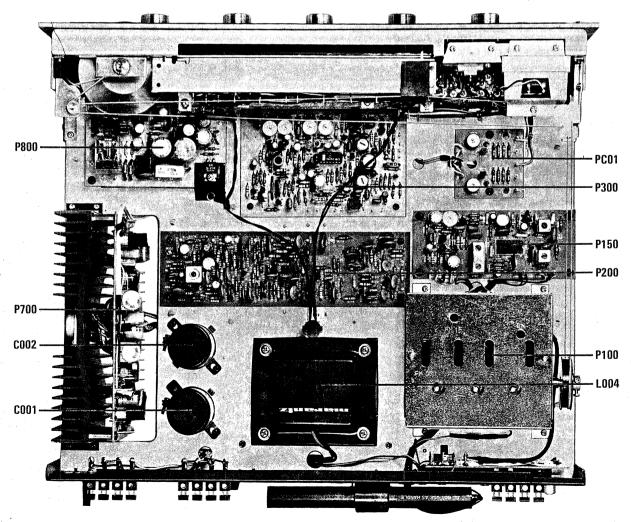


Figure 3. Main Chassis Component Locations (Top View)

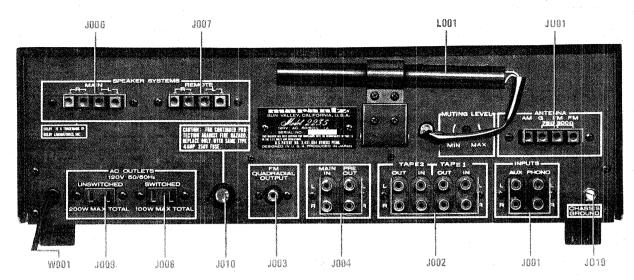


Figure 4. Rear Panel Jacks and Component Locations

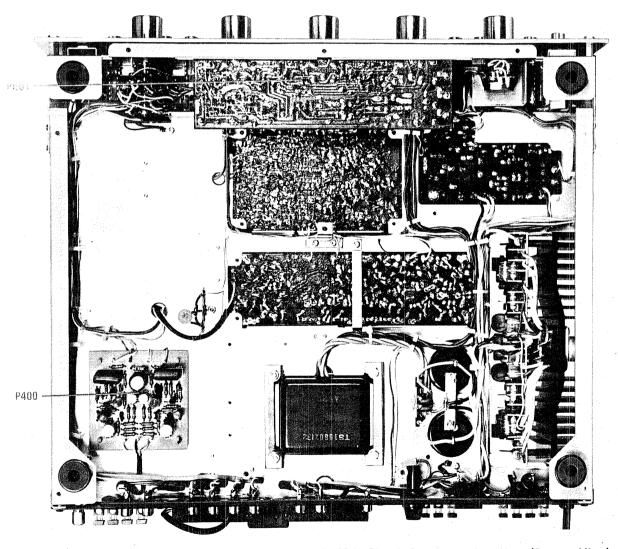


Figure 5. Main Chassis Component Locations (Bottom View)

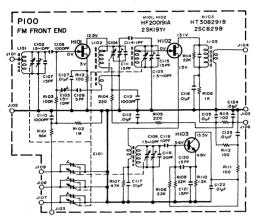


Figure 6. P100 Circuit Diagram

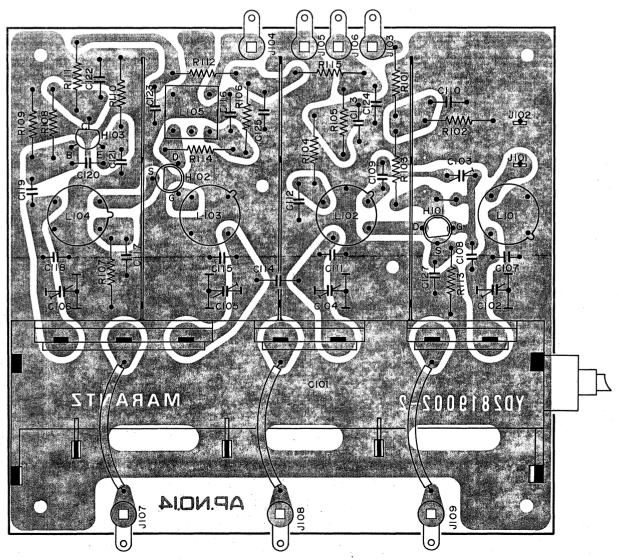


Figure 7. FM Front End Board — P100 Component Assembly Diagram

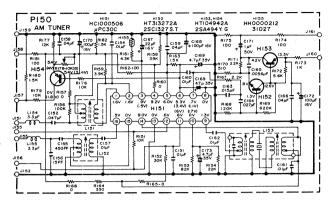


Figure 8. P150 Circuit Diagram

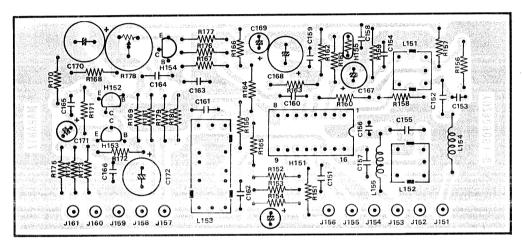


Figure 9. AM Tuner Board - P150 Component Assembly Diagram



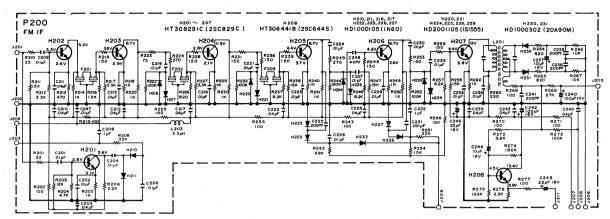


Figure 10. P200 Circuit Diagram

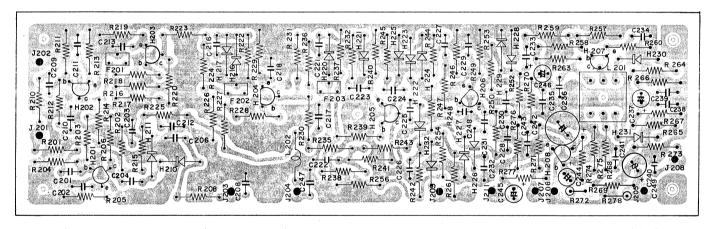


Figure 11. FM IF and Detector Board — P200 Component Assembly Diagram

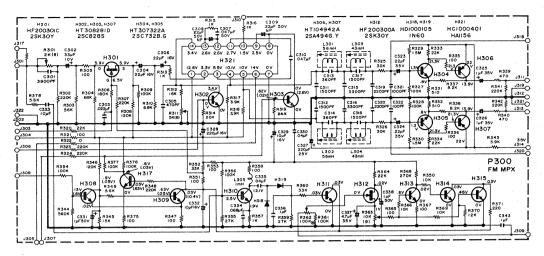


Figure 12. P300 Circuit Diagram

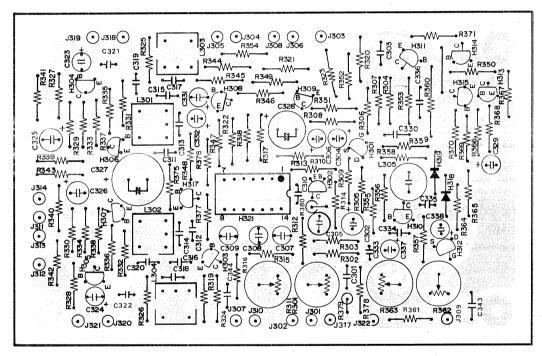


Figure 13. FM Multiplex and Muting Board — P300 Component Assembly Diagram

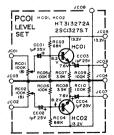


Figure 14. PC01 Circuit Diagram

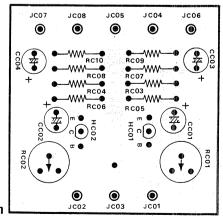


Figure 15. Dolby Level Board — PC01 Component Assembly Diagram



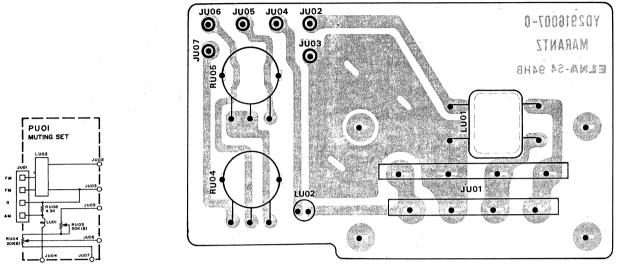


Figure 16. PU01 Circuit Diagram

Figure 17. Antenna Muting Board — PU01 Component Assembly Diagram

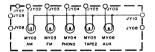


Figure 18. PY01 Circuit Diagram

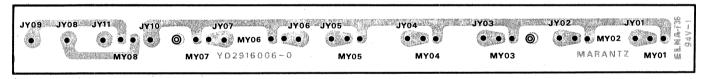


Figure 19. Function Lamp Board — PY01 Component Assembly Diagram

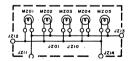


Figure 20. PZ01 Circuit Diagram

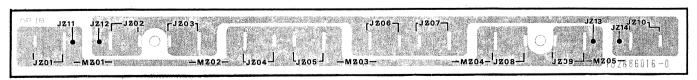


Figure 21. Dial Lamp Board — PZ01 Component Assembly Diagram

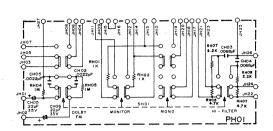


Figure 22. PH01 Circuit Diagram

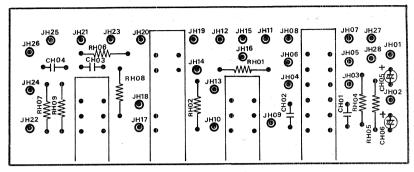


Figure 23. Dolby FM, Monitor, Mono and Hi Filter Switch Board — PHO1
Component Assembly Diagram

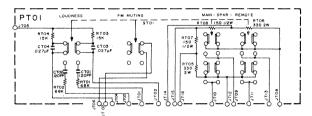


Figure 24. PT01 Circuit Diagram

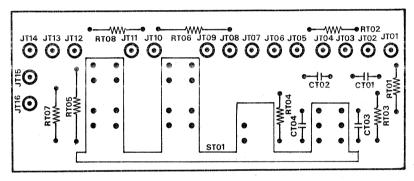


Figure 25. Loudness, FM Muting, Main and Remote Speaker Switch Board — PT01

Component Assembly Diagram

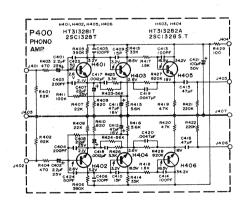


Figure 26. P400 Circuit Diagram

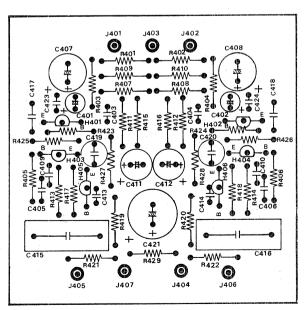


Figure 27. Phono Amplifier Board — P400 Component Assembly Diagram



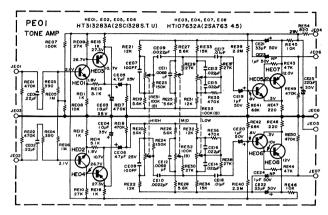


Figure 28. PE01 Circuit Diagram

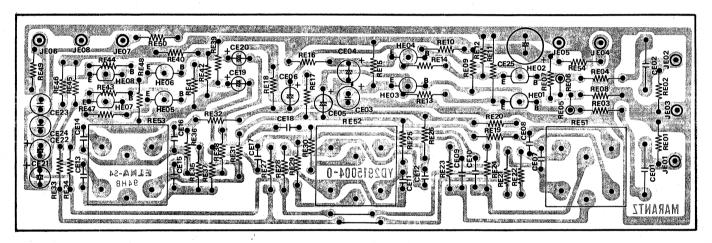


Figure 29. Pre and Tone Amplifier Board — PE01 Component Assembly Diagram

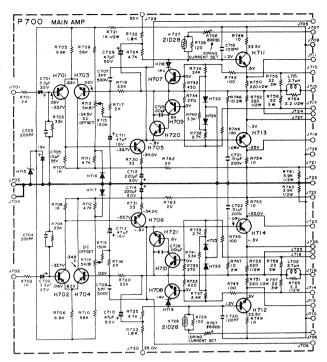


Figure 30. P700 Circuit Diagram

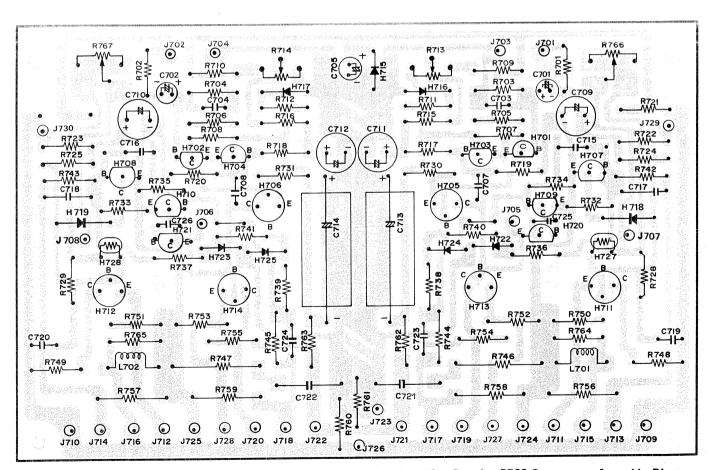


Figure 31. Main Amplifier Board - P700 Component Assembly Diagram

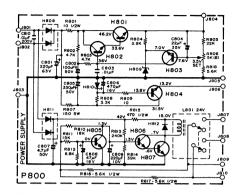


Figure 32. P800 Circuit Diagram

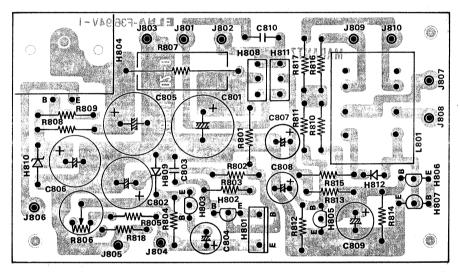
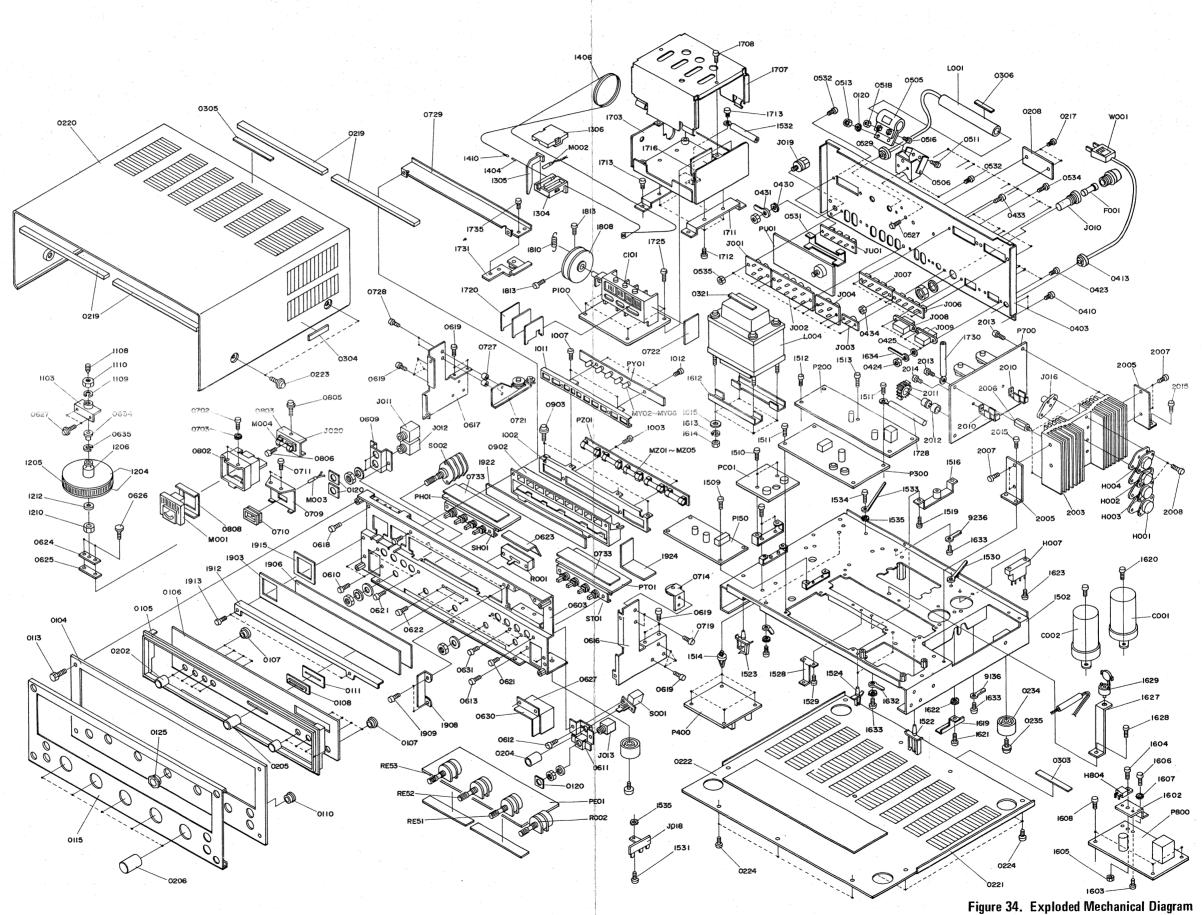


Figure 33. Power Supply Board — P800 Component Assembly Diagram



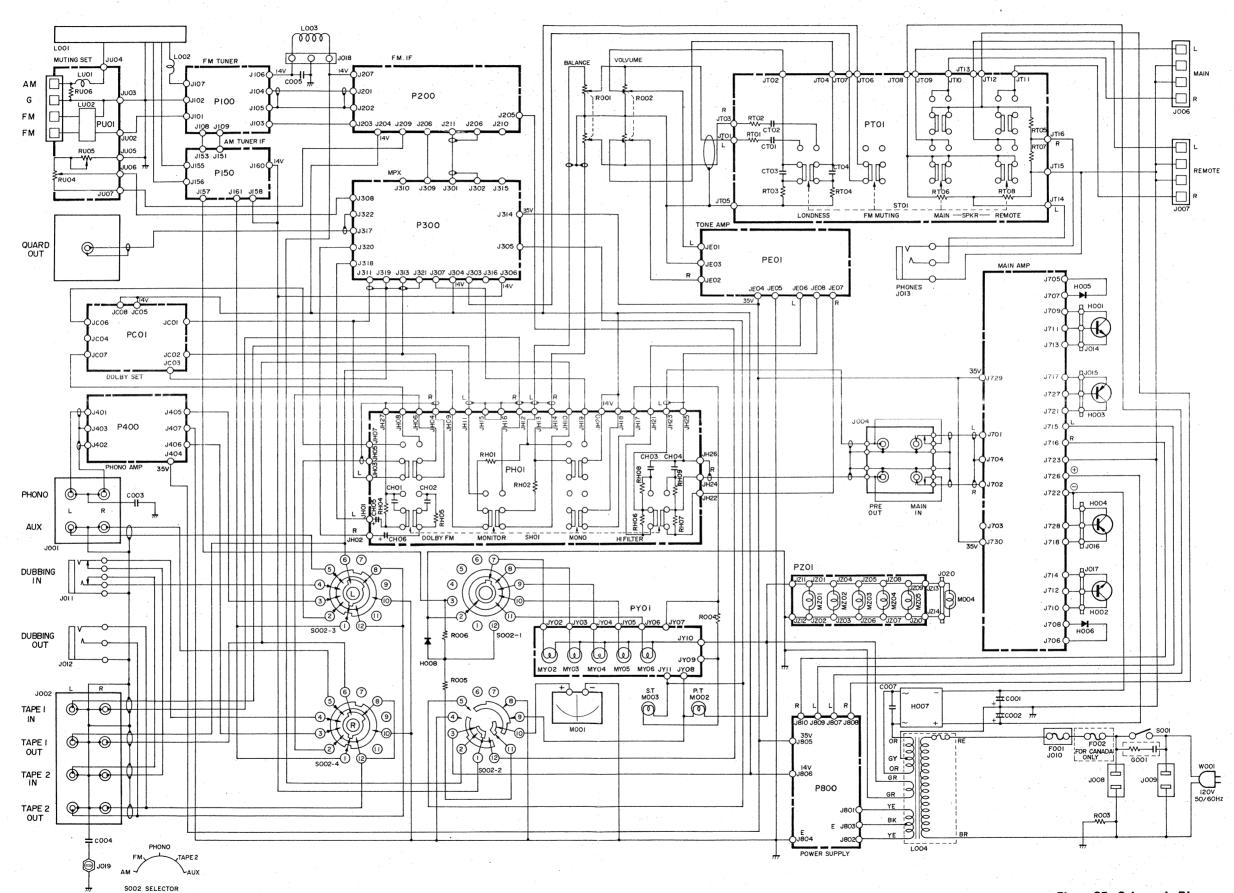
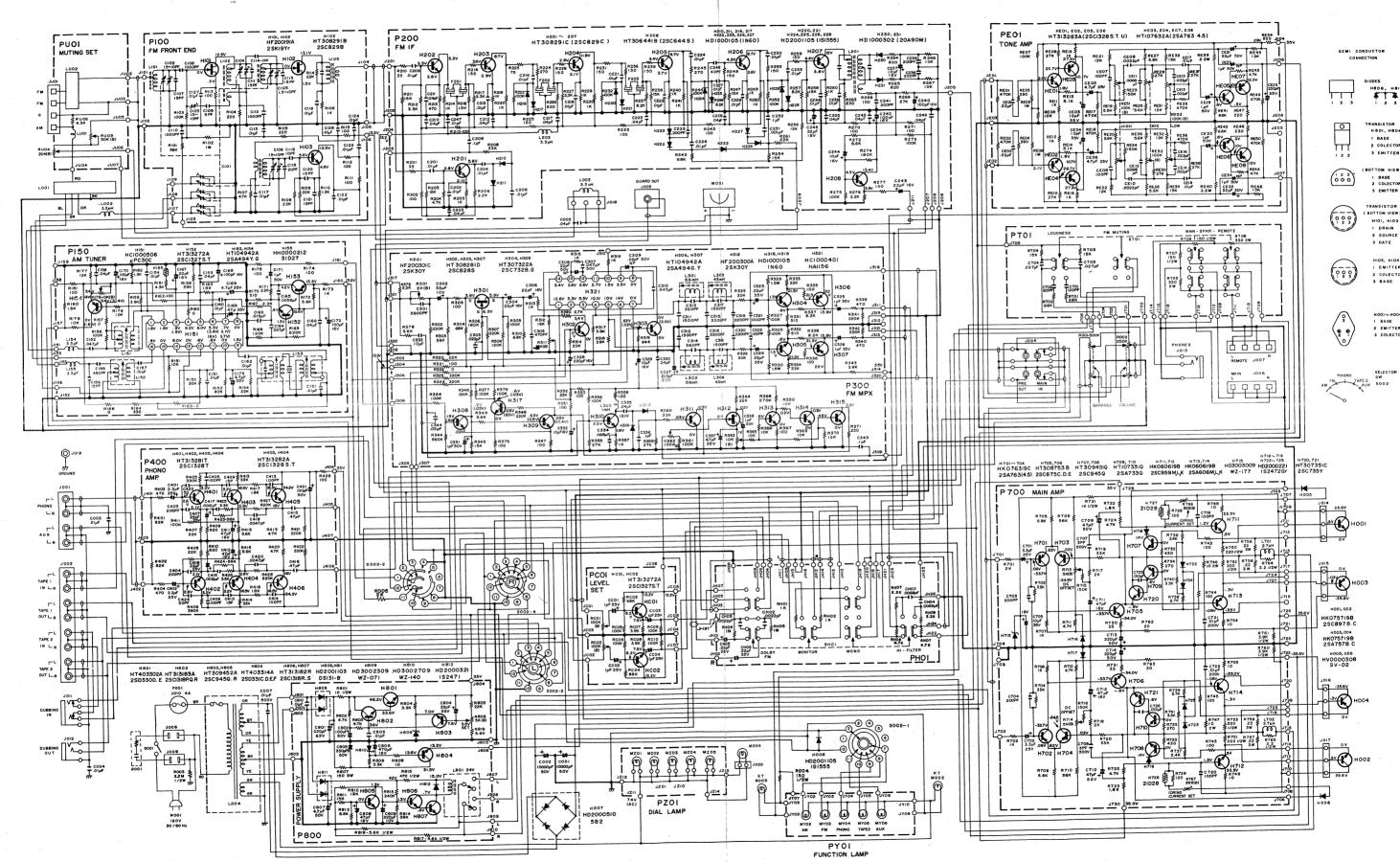


Figure 35. Schematic Diagram



MODEL 2235 NOTE: This circuit diagram applies to units manufactured for the U.S.A. market.

Figure 36. Circuit Diagram

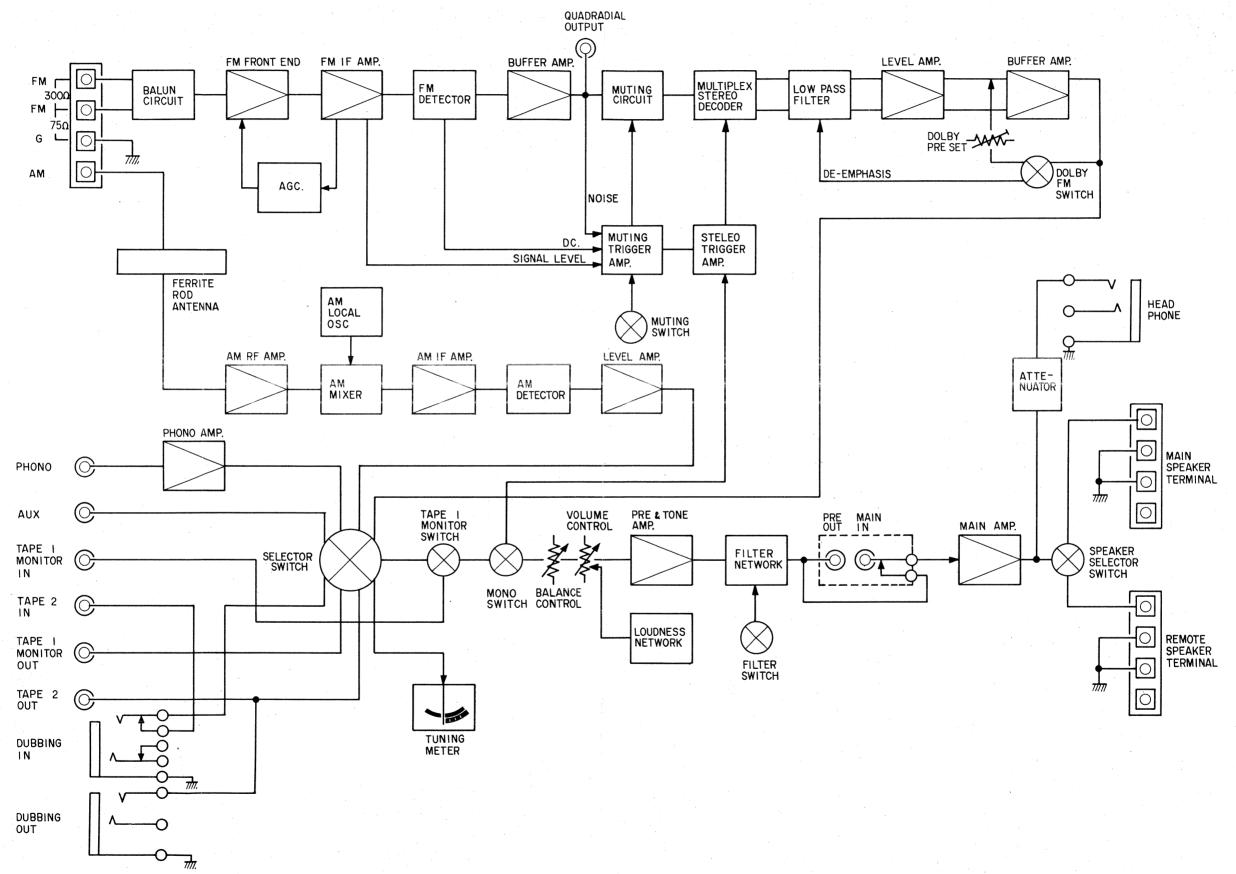


Figure 37. Block Diagram

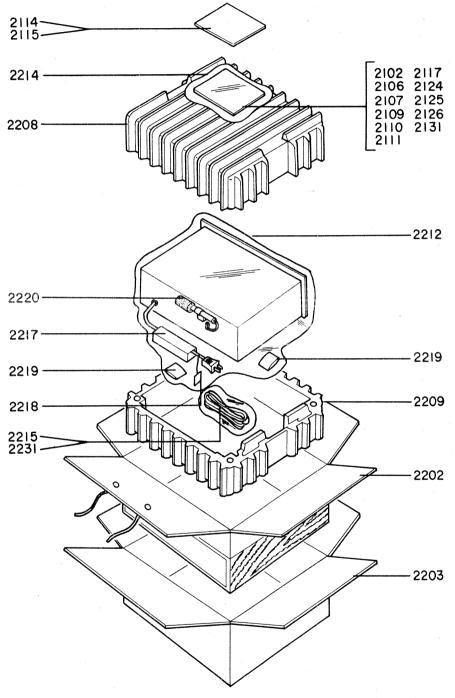


Figure 38. Packing

# 10. PARTS LIST

DEE		ΤY	· T			REF.		271	7.		
REF. DESIG.				PART NO.	DESCRIPTION	DESIG				PART NO.	DESCRIPTION
A	1	1	1	292706340	Front Panel Assembly	0219		4	4	257711807	Spacer
0104	1	1	1	292706301 285340101	Escutcheon Frame	0220	1	1	1	281825701	Lid
0106	1	1	1	291515801	Window	0221	1	i	1	281825702	Lid
0107	9	9	9	288625901	Bush	0222	1	1	1	291512001	Insulator
0108	1	1	1	285425901	Bush	0223	4	4	4	51480406S	B.H.M. Screw F, B4x6
		.				0224	10	10	10	51100406S	B.H.M. Screw, B4x6
0111	1	1	1	291510701	Sheet	0234	4	4	4	293205701	Leg
0115	1	1	1	291605301	Cover	0235	4	4	4	51440410S	B.H.M. Screws S, B4x10
0120	3	3	3	289610701	Sheet	0202		1		257886101	Label III Caution
					·	0303	1	1	1	257886101	Label, UL Caution Label, Do not remove cover.
В	1	1	1	285327340	Fly Wheel Assembly	0305	1	1	1	257886103	Label, See marking on bottom.
1204	2	2	2	257706302	Escutcheon	0306	1	1	1	250626506	Indicator, Do not use as handle.
1205	1	1	1	257727301	Fly Wheel	0311		1		951091101	Label, LL No.
1	1	1	1	285311201	Shaft	0312		1		282186102	Label, Fuse Caution
1210	1	1	1	53110603E	Hexagon Nut	0313	1			951091102	Label, UL Factory Code
1212 M002	1	1	1	54020601E IN1008030	Flat Washer P Lamp	0316	1	1	1	951110102	Label, UL Label, On Transformer
10002	•	•	•		Lamp	0321	1	1	1	288686101 951022101	Label, Fuse Caution
С	1	1	1	291510340	Pointer Assembly	0020	١.	Ι.		331022101	Laber, 1 de Gadron
1304		1	1	291510301	Pointer	0403	1	1		292716009	Bracket
1305	1	1	1	281810302	Pointer	0410	6	6	6	51060306S	B.H.M. Screw, B3x6
1306	1	1	1	291510302	Pointer	0413	1	1		145525903	Bush, Power Code
						0418			2	54050300R	T.L. Washer OR
	4	1	4	120200640	Hook Assembly	0419			2	51060316A	P.H.M. Screw, P3x16
1404	1	1	1	120200640 120225801	Hook	0420	4	4	2	53110303A 51060308S	Hexagon Nut B.H.M. Screw, B3x8
1406	1	1	1	72080802A	String	0424	4	4		53110303A	Hexagon Nut
						0425	4	4	4	54050300R	T.L. Washer OR
											·
E	1	1	1	281915943	Drum Assembly	0430	1	1	1	54050400R	T.L. Washer OR
1808		1	1	281915901	Drum	0431	1	1	1	62041760W	Lug
1810	1	1 2	2	71101689L 51064019A	Spring Set Screw	0433	4	4	4	51060308S	B.H.M. Screw, B3x8
1013	_	_	-	3100-0137	Set Selevi	0434	4	4	4	53110303A	Hexagon Nut
1						0505	1	1	1	281927103	Holder, Antenne
F	1	1	1	281825740	Top Lid Assembly	0506	1	1	1	257816052	Bracket K
0219	1	1	1	257711807	Spacer	0511	2	2	2	51060310S	B.H.M. Screw, B3x10
0220	1	1	1	281825701	Lid		2	2	2	54050300R	T.L. Washer OR
1						0513	2	2	2	53110303E	Hexagon Nut
G	1	1	1	281825741	Bottom Lid Assembly		2	2	2	510603108	B.H.M. Screw, B3x10
0221	1	1	1	281825702	Lid	0518 0527	2	2	3	53110303E 51100306S	Hexagon Nut B.H.M. Screw, B3x6
0222	1	1	1	291512001	Insulator	0527	1	1	1	145525903	Bush
						0523	1	1	1	291616005	Bracket
						0532	1	2	2	51060306S	B.H.M. Screw, B3x6
H			1	292716040	Rear Panel Assembly						
0405			1	292716022	Bracket	0534	8	8	8	51060308S	B.H.M. Screw, B3x8
0414			1	284906702 282125901	Cap   Bush	0535	8	8	8	53110303A	Hexagon Nut
0417			2	55060305S	T.R. Rivet	0603	1	1	1	291516050	Bracket K
"""			_			0609	1	1.	1	291616002	Bracket
					1	0610	2	2		51100306A	B.H.M. Screw, B3x6
					1	0611	1	1	1	291616003	Bracket
0125	1	1	1	292705501	Collar	0612	2	2		51060306A	P.H.M. Screw, P3x6
0202	0		6	200615402	Knob Bushawit-t	0613	2	2	2	51100306A	P.H.M. Screw, P3x6
0202 0204		8	8	288615403 290415404	Knob, Pushswitch Knob, Power	0616	1	1	1	281816003 281816004	Bracket Bracket
0204		1	1	285015401	Knob, Slide Volume	0617	4	4	1 4	51100406A	B.H.M. Screw, B4x6
0206		5	5	281815403	Knob, Single		1 .	10	1 1	51570306B	P.H. Tapped Screw,P3x6ST
0208				292726501	Indicator, Name Plate						- P. F
0209		1		292726502	Indicator, Name Plate	0621	4	4	4	51100306A	B.H.M. Screw, B3x6
0210	_		1	292726503	Indicator, Name Plate	0622	2	2	1 1	51100306A	B.H.M. Screw, B3x6
0217	2	2	2	51060306S	B.H.M. Screw, B3x6	0623	1	1	1	291512002	Insulator
						0624	1	1	1	257710602	Bearing Spacer
						0625	1	1	1	141511801	Spacer
						1					
,											

REF. DESIG		2TY	E	PART NO.	DESCRIPTION	REF. DESIG.	-	C		PART NO.	DESCRIPTION
0626	-	2	2	51040306A	F.H.M. Screw, F3×6	1604	├	1	1	51100310E	B.H.M. Screw, B3x10
0627	2	2	2	51470306A	B.H.M. Screw FS	1605		1	1	53110301E	Hexagon Nut
0629	1	1	1	291510903	Shield	1606	1	1	1	51570306S	P.H. Tapped Screw, P3x6ST
0630	2	2	2	291512003	Insulator	1607	1	1	1	54050300R	
0631	2	2	2	51100305A	B.H.M. Screw, B3x5	1608		3	3	51100306S	B.H.M. Screw, B3x6
						1612	2	2	2	292700501	Clamper
0634	1	1	1	285011202	Shaft	1613		4	4	54040402A	Spring Washer
0635	1	1	1	54040402N	Spring Washer	1614	4	4	4	53110401A	Hexagon Nut
0702	2	2	2	51570306B	P.H. Tapped Screw, P3x6ST	1615	4	4	4	54020401A	Flat Washer P
0703	2	2	2	54050300R	T.L.Washer OR	1619	1	1	1	292716004	Bracket
0706	2	2	2	51042608A	F.H.M. Screw, F2.6x8	1620	4	4	4	51570306S	P.H. Tapped Screw, P3x6ST
0709	1	1	1	291516004	Bracket ·	1621	1	1	1	51570306B	P.H. Tapped Screw, P3x6ST
0710	1	1	1	291225901	Bush	1622	1	1	1	54050300R	1 Control of the cont
0711	2	2	2	51570305B	P.H.Tapped Screw, P3x5ST	1623	2	2	2	51570310B	P.H. Tapped Screw, P3x10ST Bracket
0714	1	1	1	291626251	Pulley K	1627 1628	1	1 1	1	292716005 51570306B	P.H. Tapped Screw, P3x6ST
0719	2	2	2	51100306A	B.H.M. Screw, B3x6 Pulley K	1629		1	1	290825901	Bush
0721	1 2	1 2	1 2	292726251 51100306A	B.H.M. Screw, B3×6	1632		1	1	62030039W	1
0720	2	2	2	51100300A	B.H.IVI. Screw, Boxe	1633	1	4	4	51570306B	P.H. Tapped Screw, P3x6ST
0729	1	1	1	287105102	Guide	1634	i	1	1	138200503	Clamper
0733	1	1	1	288612002	Insulator						
	İ					1703		1	1	273010950	Shield K
0802	1	1	1	285427401	Reflector	1707	1	1	1	273010902	Shield
0803	1	1	1	285427101	Holder	1708	1	2	2	51100306B	B.H.M. Screw, B3x6 Bracket
0805	1	1	1	51480306A	B.H.M. Screw F	1711	1	2	2	292716006	B.H.M. Screw, B3×6
0806	1	1	1	51570305B	P.H.Tapped Screw, P3x5ST Sheet	1712 1713	1	4	4	51100306B 51570306B	P.H. Tapped Screw, P3x6ST
0808	1	1	1	288610701	Stieet	1716	1	1	1	291612003	Insulator
0902	1	1	1	287127401	Reflector	1720	1	3	3	273010903	Shield
0903	1	2	2	51480306A	B.H.M. Screw F	1722	1	1	1	341105605	Buffer
						1725	5	5	5	51100306S	B.H.M. Screw, B3x6
1002	1	1	1	287127101	Holder						
1003		2	2	51570306B	P.H. Tapped Screw, P3x6ST	1728		1	1	138200503	Clamper
1007	2	2	2	51100306A	B.H.M. Screw, B3x6	1730 1731	1	1	1	138200503 291726250	Clamper Pulley K
1011	1 2	1 2	1 2	288627101 51570306B	Holder P.H. Tapped Screw, P3x6ST	1735		2	2	51100306A	B.H.M. Screw, B3x6
1012	2	_	-	313703000	1.11. Tapped Sciew, 1 3x001	1,,00	-	-	-	0110000071	Birmin Gerett, Bene
1103	1	1	1	285310650	Bearing K	1903	1	1	1	292730201	Dial
1108	1	1	1	51640410D	Set Screw C P	1906		1	1	285310701	Sheet
1109	1	1	1	54040402N	Spring Washer	1908	1	1	1	285326901	Protector
1110	1	1	1	53110403E	Hexagon Nut	1909	5	2	2	51570306B	P.H. Tapped Screw, P3x6ST
1				E0000E400	- I - D. IO.	1912		1 2	1 2	291526901 51570305B	Protector P.H. Tapped Screw, P3x5ST
1410	1 1	1	1	56382540G	1	1915		1	1	287105303	Cover
1502 1509		1 4	1	292710550 51100306S	Chassis K B.H.M. Screw, B3x6	1922		1	1	288612201	Sticker
1510			2	51100306S		1924		1	1	281912005	
1511		4	4	51570306S	P.H. Tapped Screw, P3x6ST	1951		1		951061105	Label, 5A
1512		4	4	51570306S	P.H. Tapped Screw, P3x6ST						
1513	: 1	1	1	51100306S	B.H.M. Screw, B3x6	2003		1	1	289026701	Heat Sink
1514	t i	4	4	389610101	Support	2005		2	2	289016003	Bracket
1516		1	1	292710450	Retainer K	2006		4	4	281810104	Support R.H. Tapped Screw, R3x5ST
1519		2	2	51570306B	P.H. Tapped Screw, P3x6ST	2007		8	8	51380305T 51100316E	B.H.M. Screw, B3x16
1522	2	2	2	288600503	Clamper	2010		2	2	289026703	Heat Sink
1523	5	5	5	288600502	Clamper	2010		4	4	289226703	Heat Sink
1524		4	4	288600505	Clamper	2012		6	6	281811806	Spacer
1528		1	1	292716003	Bracket	2013		4	4	51100306S	B.H.M. Screw, B3x6
1529	2	2	2	51570306B	P.H. Tapped Screw, P3x6ST	2014		2	2	51100204A	
1530		1	1	282100501	Clamper	2015	4	4	4	51570306B	P.H. Tapped Screw, P3x6ST
1531	1 . 1	1	1	51570306B	P.H. Tapped Screw, P3x6ST	0010			_	00004000	Becaling
1532	1	1	1	138200503	Clamper	2019			1	288816005	Bracket P.H. Tapped Screw, P3x6ST
1533 1534	1 1		1	287100501	Clamper	2020			2 2	51570306B 51100306S	B.H.M. Screw, B3x6
1534	1 2	1 2	1 2	51570306B 54050300R	P.H. Tapped Screw, P3x6ST T.L. Washer OR	2021			1	292710901	Shield
1000	-	4	4	240303001	I.L. VVasilei UN	2022			1	285612001	Insulator
1602	1	1	1	291626702	Heat Sink				Ĺ		
1603		2	2	51102606S	B.H.M. Screw, B2.6x6						
						L				L	

REF. DESIG.         U C E         PART NO.         DESCRIPTION           2024   2026   1 292716007   292716007   292716007   292716007   292716007   292716007   29278571   29278501   292785101   292785101   292785101   292785101   292785101   292785101   292785101   292785101   292785101   292785101   292785101   292785101   292785101   292785101   292785601   292785601   292785601   292785601   292785602   2010   1 292785602   2010	
2024	
1	
1	
2028	
2029	
2102   1	
2107	
2107	
2108	
2109	
2110	
2111	
2114	
2115	
2117	
2124   1	
2125   1	
2126   1	
2126	
2131	
2202   1   1   1   292780101   Packing Case, Inner   Packing Case, Outer   Packing Case, Outer   Packing Case, Outer   Cushion, Upper   Cushion, Lower   Packing Case, Outer   Cushion, Upper   Cushion, Lower   Polyethylene Bag, Set   Polyethylene Bag, Printed Matter   Packing Case, Outer   Cushion, Upper   Cushion, Lower   Polyethylene Bag, Set   Polyethylene Bag, Printed Matter   Polyethylene Bag, Printed Matter   Polyethylene Bag, Accessories   Polyethylene Bag, Accessor	
2203   1   1   292780111   Packing Case, Outer   2208   1   1   281880304   Cushion, Upper   Cushion, Lower   2209   1   1   1   901483838   Polyethylene Bag, Set   2214   1   1   901302501   Polyethylene Bag, Printed Matter   2215   1   1   1   901302501   Polyethylene Bag, Accessories   2217   1   1   1   102980401   Sleeve   2218   1   956000004   Hang Tag   Silicagel	
2203   1   1   292780111   Packing Case, Outer   2208   1   1   281880304   Cushion, Upper   Cushion, Lower   2209   1   1   1   901483838   Polyethylene Bag, Set   2214   1   1   901302501   Polyethylene Bag, Printed Matter   2215   1   1   1   901302501   Polyethylene Bag, Accessories   2217   1   1   1   102980401   Sleeve   2218   1   956000004   Hang Tag   Silicagel	
2209	
2212   1   1   901483838   Polyethylene Bag, Set     2214   1   1   901302501   Polyethylene Bag, Printed Matter     2215   1   1   901302501   Polyethylene Bag, Accessories	
2214   1   1   901302501   Polyethylene Bag, Printed Matter   2215   1   1   901302501   Polyethylene Bag, Accessories   2217   1   1   102980401   Sleeve   Hang Tag   2219   2   2   273182101   Silicagel	
2215   1   1   901302501   Polyethylene Bag, Accessories   2217   1   1   102980401   Sleeve   Hang Tag   Silicagel   Silicagel	
2217	r
2218	
2219 2 2 2 273182101 Silicagel	
2220 1 1 1 281005601 Buffor	
2222   4     952281501   Serial No. Card   2223   4   952301512   Serial No. Card	
2223	
2231 1 1 1 ZA0200007 Ext. Antenna	
9136 1 1 1 62030039W Lug	
9236 1 1 1 62030039W Lug	
0200 /   /   020000000   2ug	
FM FRONT END CIRCUIT BO	ARD-
P100	
P100   1   1   YD2819002   P.W. Board, FM Front End (Prin	tOnly)
1 1 1 ZZ2927102 P•W. Board Assembly	
DAGO DEGICTORS	
P100-RESISTORS All resistors are ±5% and ¼W.	
R101 1 1 1 RT0556314 56KΩ	
R101   1   1   R10350314   36832   1   1   1   RT0510514   1   1   1   RT0510514   1   1   1   1   1   1   1   1   1	
R102   1   1   R10310314   1812   R103   1   1   RT0510414   100KΩ	
R104   1   1   RT0522114   220Ω	
R105 1 1 1 RT0522114 220Ω	
R106 1 1 1 RT0510214 1KΩ	
R107 1 1 1 RT0547214 4.7KΩ	
R108 1 1 1 RT0522314 22KΩ	
R109 1 1 1 RT0522314 22KΩ	
R110 1 1 1 RT0512214 1.2KΩ	
R111 1 1 1 RT0510114 100Ω	
R112 1 1 1 RT0510114 100Ω	
R113 1 1 1 RT0510114 100Ω	
R114 1 1 1 RT0522314 22KΩ	
R115 1 1 1 RT0510114 100Ω	
P100-CAPACITORS C101 1 1 1 CA4330001 Variable	
C101 1 1 1 CA4330001 Variable	

REF. DESIG	_	C		PART NO.	DESCRIPTION
	$\dagger$	T	$\vdash$	OT1100001	Tri
C102	1	1 1	1 1	CT1100001 CT1100002	Trimming, 1.5~10PF Trimming, 1.5~10PF
C103	1	1	1	CT1100002	Trimming, 1.5~10PF
C105	1	1	1	CT1100001	Trimming, 1.5~10PF
C106	1	1	1	CT1100001	Trimming, 1.5~10PF
1		l _			
C107	1	1	1 1	DD1615001	
C108	1	1	1	DK1710201 DD1105001	Ceramic, 1000PF±20% Ceramic, 5PF±0.5PF
C110	1 -	1	1	DK1710201	Ceramic, 1000PF±20%
0	'	•	•	2,	
C111	1	1	1	DD1615001	Ceramic, 15PF±10%
C112		1	1	DK1710201	· ·
C113	1	1	1	DK1710301	
C114	1	1	1	DD1001001 DD1615001	1
C116	1	1	1	DK1710301	,
C117	1	1	1	DK1710301	
C118	1	1	1	DD1620003	
C119	1	1	1	DD1210006	
C120	1	1	1	DD1615003	Ceramic, 15PF±10%
C121	1	1	1	DD1615000	Ceramic, 15PF±10%
C121	1	1	1	DD1615003 DK1710301	
C123		1	1	DK1710301	
C124	1	1	1		, ,
C128	1	1	1	DK1710301	Ceramic, 0.01 µF ± 20%
C127	1	1	1	DK1710301	Ceramic, 0.01µF±20%
					D400 00U 0 0 TD 4NOF
1 101		,	1	1 41202602	P100-COILS & TRANSF. Antenna Coil
L101	1	1	1		
L103	1	1	1	LA1202605	,
L104		1	1	LO1202608	
L105	1	1	1	LI1001601	IFT
1,1404				1150004044	P100-MISCELLANEOUS
H101	1 1	1	1	HF200191A HF200191A	·
H103	1 1	1	1	HT305351B	
11100	١.	•	•	1110000011	11411313101, 200000(B)
J101	1	1	1	YP1000094	Plug
J102	1	1	1	YP1000094	Plug
J103	1	1	1	57271240W	
J104	1	1	1	57271240W	
J105	1	1	1	57271240W 57271240W	
J106	1	1	1	57271240W	
J108	1	1	1	57271240W	
J109	1	1	1	57271240W	
				VDOOOCC	AM TUNER CIRCUIT BOARD-P150
P150	1	1	1	YD2909001 ZZ2927101	P.W. Board, AM Tuner(Print Only) P.W. Board Assembly
		• 1	'	£££32/101	1 Dodia Assembly
I					P150-RESISTORS
					All resistors are ±5% and ¼W,
					unless otherwise indicated.
R151	1	1	1	RT0510314	10KΩ
R152		1.	1	RT0530314 RT0582314	30ΚΩ 82ΚΩ
R153	1	1	1	RT0522314	22ΚΩ
R156		1	1	RT0510414	
R157		1	1	RC0000012	0Ω, ½W
R158		1	1	RT0539314	39ΚΩ
R159		1	1	RT0539214	3.9ΚΩ
R160	1	1	1	RC0000012	0Ω, ½W

REF. DESIG.		C	′. E	PART NO.	DESCRIPTION	REF. DESIG	-	C		PART NO.	DESCRIPTION
R161	1	1	1	RT0543214	4.3ΚΩ	J155 J156	1	1	1	YP1000113 YP1000113	Plug Plug
R162	1	1	1	RT0510114	100Ω	J157	1	1	1	YP1000113	Plug
R163		1	1	RT0515214		J158	1	1	1	YP1000113	Plug
R164		1	1	RT0533114		J159 J160	1	1	1	YP1000113 YP1000113	Plug   Plug
R165		1	1	RC0000012 RC0000012	, .	J161	1	1	1	YP1000113	Plug
R167		1	1	RT0522214	, ·	0,0,	'		•	11 1000110	1.129
R168		1	1	RT0582314	i i						FM IF & DETECTOR CIRCUIT
R169		1	1	RT0562414							BOARD-P200
R170		1	1	RT0551114		P200	1	1	1	ZZ2927001	P.W. Board, FM IF & Detector (Print P.W. Board Assembly Only)
R171	1	1	1	RT0522214	2.2KΩ		'	1	. 1	222927001	F.W. Board Assembly Only
R172	1	1	1	RT0556214	5.6ΚΩ						P200-RESISTORS
R173		1	1	RT0510214	i t						All resistors are ±5% and ¼W.
1	1	1	1	RT0510114	i <b>!</b>	R201	1	1	1	RT0533014	33Ω
R175	- 4	1	1	RT0510414		R202 R203	1	1	1	RT0510114 RT0512314	
R176	1	1	1	RT0510314 RT0582214	;	R204		1	1	RT0512314	
R178	- 1	1	1	RA0103025		R205		1	1	RT0510214	
R179	- 1	1	1	RT0510314	1	R206	1	1	1	RT0522214	2.2ΚΩ
R180	1	1	1	RT0515214		R208	1 1	1	1	RT0533314	
R181	1	1	1	RT0510114	$100\Omega$	R210	1	1	1	RT0533014	
R182	1	1	1	RT0515214	1560	R211 R212	3	1	1	RT0515214 RT0533214	
N 102	1	1	1	h 10515214	1.5/22	11212			•	1110000214	0.01022
					P150-CAPACITORS	R213		1	1	RT0547114	
1 (	1	1	1	DK1710301	Ceramic, 0.01µF±20%	R214		1	1	RT0510214	
f 1	1	1	1	DF1747305		R215 R216	5 1	1	1	RT0510114 RT0515214	
C154	day to	1	1	DK1710301 DF6545101	Ceramic, 0.01µF±20% Film, 450PF±5%	R217		1	1	RT0533214	
C156	-	- 1	1	DD1615001		R218		1	1	RT0515114	
C157	1		1	DK1710301	Ceramic, 0.01µF±20%	R219		1	1	RT0510214	1ΚΩ
C158	1	1	1	DK1840302		R220	1 1	1	1	RT0510214	
C159	1	1	1	DK1840302		R222	1	1	1	RT0510414	100ΚΩ
C160 C161	1	1	1	DK1710301 DK1710301	Ceramic, $0.01\mu\text{F}\pm20\%$ Ceramic, $0.01\mu\text{F}\pm20\%$	R223	1	1	1	RT0575014	75Ω
Cidi	1	1	1	DK1710301	Ceramic, 0.01µ1 ±20%	R224	1	1	1	RT0527114	$270\Omega$
C162	1	1	1	DK1710301	Ceramic, 0.01µF±20%	R225		1	1	RT0515114	150Ω
	1	- 1	1	DF1615305	Film, $0.015\mu F \pm 10\%$	R226		1	1	RT0515214	1.5ΚΩ
C164	1	- 1	1	DF1627305	Film, 0.027μF±10%	R227 R228		1	1	RT0533214 RT0515114	3.3KΩ 150Ω
	1		1	DF1756205 DK1840302	Film, 5600PF±20% Film, 0,04µF+80%,-20%	R229		1	1	RT0510114	15032 1KΩ
	1	- 1	1	EA2260169	· · · · · · · · · · · · · · · · · · ·	R230		1	1	RT0510214	1ΚΩ
C168			- 1		Electrolytic, 100µF,16V	R231		1	1	RT0515114	
C169			1		Electrolytic, 4.7μF,35V	R232		1	1	RT0510414	
	- 1	1			Electrolytic, 100μF,16V	R235	1	1	1	RT0510114	10032
C171	1	1	1	EA1050509	Electrolytic, 1μF, 50V	R236	1	1	1	RT0513114	130Ω
C172	1	1	1	EA1070169	Electrolytic, 100µF,16V	R237	1	1	1	RT0582214	
C173	1	- 1	1	i i	Electrolytic, 4.7µF, 35V	R238		1	1	RT0515314	
					DATE MISSELL AND SOLIS	R239		1	1	RT0515114 RT0510214	
H151	,	,	1	HC1000506	P150-MISCELLANEOUS I.C., µPC30C	R240 R241		1	1	RT0510214	
H152		- 1		HT313272A		R242	1	3	1	RT0568314	
H153		- 1		HT104942A		R243	1	1	1	RT0510114	100Ω
H154		- 1	1	HT104942A	Transistor, 2SA494 Y,G	R244			1	RT0510414	100ΚΩ
H155	1	1	1	HH0000212	Thermistor, 31D27	R245	1	1	1	RT0527114	$270\Omega$
L151	1	1	1	LA1001019	RF Coil. AM	R246	1	1	1	RT0582214	8.2ΚΩ
			1	1	OSC Coil, AM	R247	1	1	1	RT0515314	The state of the s
L153	1	1	1	LI1028003	IFT, AM Ceramic Filter	R248	- 1	1	1	RT0515114	
1 1			- 1		Choke Coil, 3.3µH	R249			1	RT0510214	
L155	1	1	1	LC1332002	Choke Coil, 3.3μΗ	R250 R252		- 1	1	RT0510214 RT0510414	1
J151	1	1	1	YP1000113	Plug	R253		1	1	RT0515114	
		f	- 1	1	Plug	R254	- 1	- 1	1	RT0515314	
1 1				YP1000113							
L						L					

								-				
REF. DESIG.		C	E	PART NO.	DE	SCRIPTION	REF. DESIG		C C		PART NO.	DESCRIPTION
R256		1	1	RT0512314			C246	1	1	1	EA2260169	Electrolytic, 22µF, 16V
R257	1	1	1	RT0582214	8.2ΚΩ		C247	1	1	1	DK1710301	Ceramic. 0.01 µF±20%
D050				DT054504.4	15160		C247	1	1	1	DD1540001	- · · · · · · · · · · · · · · · · · · ·
R258		1	1	RT0515314			C248	1	1	1	DK1840302	· ·
R259		1	1	RT0515114 RT0510214			0243	'	'	۱ ۱	DIC1040302	Ceramic, 0.04μ1 / 0070,=2070
R260	-	1	1	RT0522314				l				P200-FILTERS &
R261 R263		1	1	RT0522314								SEMICONDUCTORS
R264		1	1	RT0522114			F201	1	1	1	FF1107005	Ceramic Filter, SFE107MD-1
R265		1	1	RT0582114			F202	1	1	1	FF1107005	Ceramic Filter, SFE107MD-1
R266		1	1	RT0510314			F203	1	1	1	FF1107005	Ceramic Filter, SFE107MD-1
R267		1	1	RT0510314		* *						
R268		1	1	RT0510114			H201	1	1	-1	HT308291C	Transistor, 2SC829C
							H202	1	1	1		Transistor, 2SC829C
R269	1	1	1	RT0527314	27ΚΩ		H203	1	1	1		Transistor, 2SC829C
R270		1	1	RT0510114			H204		1	1		Transistor, 2SC829C
R271		1	1	RT0510114			H205	l .	1	1		Transistor, 2SC829C
R272		1	1	RT0556214			H206		1	1		Transistor, 2SC829C
R273		1	1	RT0510414			H207	1	1	1		Transistor, 2SC829C
R274		1	1	RT0518414			H208		1	1		Transistor, 2SC644S
R275		1	1	RT0510414	100ΚΩ		H210	5	1	1	HD1000105	• • •
R276	1	1	1	RT0522214	2.2ΚΩ		H211	1	1	1	HD1000105	Diode, 1N60
Ŗ277	1	1	1	RT0510114	$100\Omega$		11				110000	D: 1 404555
							H216	1	1	1		Diode, 1S1555
	-				P200-CAPAC	ITORS	H217	t	1	1 1		Diode, 1S1555
C201	1	1	1	DK1710301	Ceramic,	0.01µF±20%	H220	į.	1	1		Diode, 1S1555
C202		1	1	DK1710301		0.01μF±20%	H221	Į.	1	1		Diode, 1S1555
C203		1	1	DK1840302		0.04μF+80%,-20%	H222	è	1	1		Diode, 1N60
C204		1	1	DK1710301	•	0.01μF±20%	H223	1	1	1		Diode, 1N60
C206		1	1	DK1710301		$0.01 \mu F \pm 20\%$	H224	i	1	1		Diode, 1S1555
C208	1	1	1	DK1810402	•	0.1μF+80%,-20%	H225	1	1	1		Diode, 1S1555
C209	1	1	1	DK1710301		0.01μF±20%	.   H226	l l	1	1		Diode, 1N60
C210	1	1	1	DK1840302		0.04μF+80%,-20%	H227	1	1	1	HD1000105	Diode, 1N60
C211	1	1	1	DK1840302		0.04μF+80%,-20%	H228	1	1	1	HD2001105	Diode, 1S1555
C212	1	1	1	DK1840302	Ceramic,	0.04μF+80%,-20%	H229		1	1	i	Diode, 1S1555
0040				DK4740004	0	0.01 . 5 . 200/	H230	i	1	1		Diode, 20A90M
C213	1	1	1	DK1710301	•	0.01μF±20%	H231	1	1	1		Diode, 20A90M
C216	1	1	1	DK1710301		0.01μF±20%	H232	í	1	i	HD1000302	
C217		1	1	DK1840302 DK1710301		0.04μF+80%,-20% 0.01μF±20%			.		1151000002	21000, 20710011.
C218 C221		1	1	DK1710301		0.01μF±20% 0.01μF±20%	11					P200-MISCELLANEOUS
1	1	1	1	DK1710301		0.04µF+80%,-20%	L201	1	1	1	L11401623	IFT, FM
C223		1	1	DK1710301	•	0,01μF±20%	L202	1	1	1	LC1332002	Choke Coil, 3.3µH
C224	;	1	1	DK1710301		0.01μF±20%						•
C225	1	1	1	DD1620101		200PF±10%	J201	1	1	1-	YP1000113	Plug
C226		1	1	DK1710301		0.01μF±20%	J202	1	1	1	YP1000113	•
UZZU	'	'.		DICT/10001	Jordino,	J.J. p. 1 - 20 /0	J203	1	1	1		Plug
C227	1	1	1	DK1710301	Ceramic	0.01µF±20%	J204	1	1	1	YP1000113	Plug
C228	;	1	i	DK1710301		0.04µF+80%,-20%	J205	1	1	1	YP1000113	Plug
C229	1	1	1	DK1710301	•	0.01μF±20%	J206	1	1	1	YP1000113	Plug
C230		1	1	DK1710301	•	0.01μF±20%	J207	1	1	1	YP1000113	Plug
C231	1	1	1	DK1710201	•	0.001µF±20%	J208	1	1	1	YP1000113	Plug
C232	1	1	i	DK1810402	-	0.1µF+80%,-20%	J209	1	1	1	YP1000113	Plug
C233		i	1	DK1710301		0.01µF±20%	J211	1	1	1	YP1000113	Plug
C234		1	1	DK1710301		0.01μF±20%	-					
C235	1	1	1	DK1840302		0.04µF+80%,-20%						FM MPX & MUTING CIRCUIT
C236	1	1	1	DK1710301	Ceramic,	0,01µF±20%						BOARD-P300
		-	1			. ==	P300	1	1	1	YD2927002	P.W. Board, FM MPX & Muting
C237	1	1	1	EA1060169	Electrolytic,	10μF, 16V		1				(Print Only)
C238	1	1	1	DD1620101		200PF±20%	- 11	1	1	1	ZZ2927002	P.W. Board Assembly
C239	1	1	1	DD1620101		200PF±20%						
C240		1	1			100μF, 10V	11					P300-RESISTORS
C241		1	1	DD1620101	Ceramic,	200PF±20%	- 11					All resistors are ±5% and ¼W,
C242		1	1		Electrolytic,							unless otherwise indicated.
C243		1	1	DK1840302		0.04µF+80%,-20%	R301	1 :	1	1	RA0202011	
	1	1	1	EA1060169	Electrolytic,		R302	1	1	1	RT0522414	220ΚΩ
C244	٠,						1 1 11 11 11 11					har ()
	1	1	1	EA2260169	Electrolytic,	22μF, 16V	R303		1	1	RT0556314	201/75

REF. DESIG.		C		PART NO.	DESCRIPTION	REF. DESIG	-	C		PART NO.	DESCRIP	TION
				DTOCOOC 4	CONC	R367	1	1	1	RT0510114	100Ω	
R304	1	1	1	RT0568314	l F	R368	1	1	1	RT0527414	270ΚΩ	
R305	1	1	1	RT0510114 RT0518414	1	R369	1	1	1	RT0510314	10ΚΩ	
R306	1	1	1	RT0516414	· · · · · · · · · · · · · · · · · · ·	R370	1	1	1	RT0512314	12ΚΩ	
R307	1	1	1	RT0522414								
R308	1	1	1	RT0512414		R371	1	1	1	RT0522114	220Ω	
R310	1	1	1	RT0568214	I. I	R375	1	1	1	RT0510114	100Ω	
HSTO	.1	'	1	1110300214	0.0124	R376		1	1	RT0510414	100ΚΩ	
R311	1	1	1	RA0502020	Trimming, 5KΩ (B)	R377	1	1	1	RT0510414		
R312	1	1	1	RT0516314	, , , , , , , , , , , , , , , , , , ,	R378		1	1	RT0556214		
R313	1	1	1	RT0510214	1	R379	1	1	1	RT0522214		
R314	1	1	1	RT0520314	· •	R380	1	1	1	RT0527214	2.7K32	
R315	1	1	1	RT0510214	1ΚΩ						P300-CAPACITORS	•
R316	1	1	1	RT0510214	1ΚΩ	C301	1	1	1	DF1639205		) OOPF ±10%
R317	1	1	1	RT0539214	3.9ΚΩ	C302		1	1	EA3360109	the state of the s	33μF, 10V
R318	1	1	1	RT0539214	3.9ΚΩ	C303	1	1	1	DF1722305		022μF ±20%
R319	1	1	1	RT0524314	24ΚΩ	C304	1	1	1	EA2260169		22μF, 16V
R320	1	1	1	RT0522314	22ΚΩ	C305	1	1	1	DF5547101		70PF ±5%
						C306	1	1	1	EA2260169		22μF, 16V
R321	1	1	1	RT0510114		C307	1	1	1	EQ4740501		7μF, ±20%,50V
R322	1	1	1	RC0000012	0Ω, ½W	C308	1	1	1	EQ2240501		22μF, ±20%,50V
R323	1	1	1	RT0522414	:	C309	1	1	1	EQ2240501		22μF, ±20%,50V
R324	1	1	1	RT0522414	)	C310	\$	1	1	DF1747301	Film, 0.0	47μF ±20%,50V
R325	1	1	1	RT0530314	30ΚΩ	1						
R326	1	1	1	RT0530314		C311	1	1	1	DF1515205	Film, 150	OOPF ±5%
R327	1	1	1	RT0510414 RT0510414	100KΩ 100KΩ	C312	1	1	1	DF1515205	Film, 150	OOPF ±5%
R328 R329	1	1	1	RT0515414	1.5MΩ	C313	1	1	1	DD1536101	,	OPF ±5%
R330	1	1	1	RT0515514	1	C314	1	1	1	DD1536101		OPF ±5%
11330	'	'	3	1110313317	1.01014	C315		1	1	DF1533205	*	00PF ±5%
R331	1	1	1	RT0551114	510Ω	C316		1	1	DF1533205	,	00PF ±5%
R332	1	4	7	RT0551114		C317	1	1	1	DF1515205		OPF ±5%
R333	1	1	1	RT0522314		C318	1	1	1	DF1515205		00PF ±5%
R334	1	1	1	RT0522314	22ΚΩ	C319	1	1	1	DF1522205	•	OOPF ±5% OOPF ±5%
R335	1	1	1	RT0510114	100Ω	C320	1	1	1	DF1522205	Film, 220	JUFF 1576
R336	1	1	1	RT0510114	100Ω	C321	1	1	1	DF1510205	Film, 100	OOPF ±5%
R337	1	1	1	RT0582214		C322	1	1	1	DF1510205	,	00PF ±5%
R338	1	1	1	RT0582214	8.2ΚΩ	C323	1	1	1	EV2240351		2µF ±20%,35V
R339	1	1	1	RT0547114	1	C324		1	1	EV2240351		2 <sub>µ</sub> F ±20%,35V
R340	1	1	1	RT0547114	470Ω	C325	1	1	1	EV1050352	Electrolytic, 1µF	
2044				DT0500444	2001/ 0	C326	1	1	1	EV1050352	Electrolytic, 1μF	±20%,35V
R341	1	1	1	RT0522414		C327	1	1	1	EA2270259		)μF, 25V
R342 R343	1	1	1	RT0522414 RT0539214	220KΩ 3,9KΩ	C328	1	1	1	EA2270169		DμF, 16V
R344	1	1	1	RT0556414		C329	1	1	1	EA1060169	Electrolytic, 10µ	
R345	1	1	1	RT0515314	1	C330	1	1	1	DK1840302	Ceramic, 0.0	4μF +80%,-20%
R346		1	1	RT0512414		0004				E 4 4 0 E 0 E 0 0	e)	- F0V
	1	1	1	RT0510114		C331		1	1	EA1050509	Electrolytic, 1µF	
	1	1	1	RT0522414	1	C332 C333		1	1	EA1060169 DD1210001	Electrolytic 10µ Ceramic, 10F	
R349	1	1	1	RT0556214		C334		1	1	DF1668301		68µF ±10%
R350	1	1	1	RT0510314		C335		1	1	DF1740301		4μF ±20%
						C336		1	1	DK1810402		μF+80%,-20%
R351	1	1	1	RT0510114		C337	1	1	1	EA4750359	Electrolytic, 4.7	
R352	1	1	1	RT0533314	I	C338		1	1	EA1050509	Electrolytic, 1µF	
R353	1	1	1	RT0510114	i i	C343	3	1	1	DF1710402	Film, 0.1	
R354	1	1	1	RT0510414		C344		1	1	DK1820302		2μF+80%,-20%
R355	1	1	1	RT0527314	1	1						
R356	1	1	1	RT0510414		1					P300-SEMICONDUC	CTORS
R357	1	1	1	RT0510214	1	H301	1	1	1	HF200301C	FET, 2Sk	(30(Y)
R358	1	1	1	RT0510114	· · · · · · · · · · · · · · · · · · ·	H302	1	1	1	HT308281D	•	C828S
R359	1	1	1	RT0527314	-	H303	1	1	1			C828S
R360	1	1	1	RT0533314	33ΚΩ	H304	1 .	1	1	HT307322A	·	C732 B or G
P201	,	1		RT0510414	100ΚΩ	H305	1	1	1	HT307322A		C732 B or G
R361 R362	1	1	1		Trimming,100KΩ(B)	H306		1	1	HT104942A	•	1494 G or Y
R362	1	1	1	RA0104018	Trimming, $100K_2\Omega B$	H307	1	1	1	HT104942A	•	A494 G or Y
R364	1	1	1	RT0522214		H308		1	1	HT308281D	l l	C828 S
R365	1	1	1	RT0510114	1	H309	1	1	1	HT308281D	Transistor, 2SC	C828 S
R366	1	1	1	RT0510114	i :							
						L			Ш			

	, ,		···	<b>*</b>	
REF. DESIG	-	C		PART NO.	DESCRIPTION
H310	1	1	1	HT308281D	Transistor, 2SC828 S
H311 H312 H313 H314 H315 H317 H318 H319 H321	1 1 1 1 1 1	1 1 1 1 1 1 1	1 1 1 1 1 1	HF200300A HT308281D HT308281D HT308281D HT308281D	Transistor, 2SC828 S Transistor, 2SC828 S Transistor, 2SC828 S Transistor, 2SC828S Diode, 1N60
L301 L302 L303 L304 L305	1	1 1 1 1	1 1 1 1	LS1029004 LS1029004 LS1029005 LS1029005 LC2105001	P300-MISCELLANEOUS MPX Coil, 56mH MPX Coil, 56mH MPX Coil, 43mH MPX Coil, 43mH Choke Coil, 1mH
J314 J317	1	1	1	YP1000113	Plug
≀ J322	1	1	1	YP1000113	Plug
PC01	1	1	1	YD2916003 ZZ2916003	DOLBY LEVEL CIRCUIT BOARD-PC01 P.W.Board, Dolby Level (Print Only) P. W. Board Assembly
RC01 RC02 RC03 RC04 RC05 RC06 RC07 RC08 RC09 RC10	1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	RA0104015 RA0104015 RT0568314 RT0568314 RT0510414 RT0510414 RT0539214 RT0539214 RT0510414 RT0510414	$ \begin{array}{llllllllllllllllllllllllllllllllllll$
CC01 CC02 CC03 CC04	1	1 1 1 1	1 1 1 1	EV1050256 EV1050256 EV1050256 EV1050256	Electrolytic, 1μF, 25V
JC01 JC02 JC03 JC04 JC05 JC06 JC07 JC08	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1	YP1000113 YP1000113 YP1000113 YP1000113 YP1000113 YP1000113 YP1000113	PC01-MISCELLANEOUS Plug Plug Plug Plug Plug Plug Plug Plug
HC01 HC02	1	1	1	HT313272A HT313272A	Transistor, 2SC1327 S.T Transistor, 2SC1327 S.T
PU01	1 1	1	1 1	YD2916007 ZZ2916007	ANTENNA MUTING CIRCUIT BOARD-PU01 P.W. Board, Antenna Muting (Print Only) P.W. Board Assembly

					E: For Europe
REF.		770		PART NO.	DESCRIPTION
DESIG.	U	C	E		
RU04 RU05 RU06	1	1 1 1	1 1 1		Variable Resistor, 50KΩ (B)
LU01 LU02	1	1	1	LB3007526 LC1154002	1 -
JU01 JU02	1	1	1	YT0304009	Terminal, Antenna
\ \ \ JU07	1	1	1	YP1000113	Plug
PY01	1	1 1	1 1		FUNCTION LAMP CIRCUIT BOARD-PY01 P.W. Board, Function Lamp(Print Only) P.W. Board Assembly
					PY01-MISCELLANEOUS
MY02	1	1	1	IN1008037 IN1008037	,
MY03 MY04	1	1	1		Lamp, FM, 8V 40mA Lamp, PHONO,8V 40mA
MY05		1			Lamp, TAPE 1, 8V 40mA
MY06		1	1 1		Lamp, AUX, 8V 40mA
JY02	1	î	1	YP1000113	Plug
PZ01	1	1	1	YD2886016 ZZ2927116	DIAL LAMP CIRCUIT BOARD-P201 P.W. Board, Dial Lamp(Print Only) P.W. Board Assembly PZ01-MISCELLANEOUS
MZ01 ≀ MZ05	1	1	1	IN1008007	Lamp
JZ01	1	1	1	YJ0800017	Socket
JZ11 - ≀ JZ14	1	1	1	YP1000113	Plug
PH01	1	1	1	1	FILTER & DOLBY CIRCUIT BOARD PH01 P.W. Board, Filter & Dolby(Print Only) P.W. Board Assembly P.W. Board Assembly
RH01 RH02 RH04 RH05 RH06 RH07 RH08 RH09	1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1 1	RT0510214 RT0510214 RT0510514 RT0510514 RT0547214 RT0547214 RT0522514 RT0522514	$1MΩ$ $\pm 5\%$ , $4W$ $4.7ΚΩ$ $\pm 5\%$ , $4W$ $4.7ΚΩ$ $\pm 5\%$ , $4W$ $2.2MΩ$ $\pm 5\%$ , $4W$
CH01	1	1		DF1522205	PH01-CAPACITORS, SWITCH & PLUGS Film, 0.0022µF±10%,50V

REF. QT		PART NO.	DESCRIPTION	REF. QTY.	PART NO.	DESCRIPTION
CH02 1 1 1 CH03 1 1 1 CH04 1 1 CH01 CH02 CH05 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Film, 0.0068μF±10%,50V Film, 0.0068μF±10%,50V	R413 1 1 1 R414 1 1 1 R415 1 1 1 R416 1 1 1 R417 1 1 1 R418 1 1 1 R419 1 1 1 R420 1 1 1	RT0533314 RT0533314 RT0556214 RT0556214 RT0518214 RT0518214 RT0547214	33ΚΩ 5.6ΚΩ 5.6ΚΩ 1.8ΚΩ 1.8ΚΩ 4.7ΚΩ
JH01	1   1	SP0404014 YP1000120	Pushswitch	R421 1 1 1 R422 1 1 1 R423 1 1 1 R424 1 1 1 R425 1 1 1	RT0522414 RT0522414 RT0556314 RT0556314 RT0533214	220ΚΩ 56ΚΩ 56ΚΩ 3.3ΚΩ
	1 1 1	•ZZ2915006	MAIN & REMOTE SWITCH CIRCUIT BOARD—PT01 P.W. Board, Main & Remote Switch P.W. Board Assembly PT01-RESISTORS 68ΚΩ ±5%, %W	R426 1 1 1 1 R427 1 1 1 R428 1 1 1 1 R429 1 1 1 1 C402 1 1 1 1 C403 1 1 1		820 $K\Omega$ 820 $K\Omega$ 100 $\Omega$ P400-CAPACITORS Electrolytic, 2.2 $\mu$ F $\pm$ 20%, 25V Electrolytic, 2.2 $\mu$ F $\pm$ 20%, 25V
RT02 1 1 1 RT03 1 1 1 RT04 1 1 RT05 1 1 RT06 1 1 RT07 1 1	1	RT0568314 RT0515314 RT0515314 GJ0533102 GJ0533102 GU0515112	68ΚΩ ±5%, ¼W 15ΚΩ ±5%, ¼W 15ΚΩ ±5%, ¼W 330Ω ±5%, 2W 330Ω ±5%, 2W	C404 1 1 1 1 C405 1 1 1 1 C406 1 1 1 1 C407 1 1 1 C408 1 1 1 C409 1 1 1 C410 1 1 1	DD1520101 DD1610101 DD1610101 EE2260251 EE2260251 DD1615001 DD1615001	Ceramic, 200PF $\pm$ 10%, 50V Ceramic, 100PF $\pm$ 10%, 50V Ceramic, 100PF $\pm$ 10%, 50V Electrolytic, 22 $\mu$ F $\pm$ 20%, 25V Electrolytic, 22 $\mu$ F $\pm$ 20%, 25V Ceramic, 15PF $\pm$ 10%, 50V Ceramic, 15PF $\pm$ 10%, 50V
CT02 1 1 CT03 1 1		DD1612101 DF1627305	PT01-CAPACITORS Ceramic, 120PF ±10%, 50 V Ceramic, 120PF ±10%, 50 V Film, 0.027 μF ±10%, 50 V Film, 0.027 μF ±10%, 50 V PT01-MISCELLANEOUS	C411 1 1 1 1 C412 1 1 1 C413 1 1 1 C414 1 1 1 C416 1 1 1 C417 1 1 1 C418 1 1 1 C418 1 1 1	EA4760169 EA4760169 DD1610101 DD1610101 DF1747401 DF1747401 DF5412201 DF5412201	Electrolytic, 47µF +100%,-10%,16V Ceramic, 100PF±10%, 50V
JT01	1 1	SP0404011 YP1000120	Pushswitch	C419 1 1 1 1 C420 1 1 1 1 C423 1 1 1 C424 1 1 1 1	DF5547201 DF5547201 EA1070509 DD1650001 DD1650001	
	1 1	YD2915003 ZZ2915003	EQUALIZER AMP. CIRCUIT BOARD-P400 P.W. Board, Equalizer Amp. (Print Only) P.W. Board Assembly P400-RESISTORS All resistors are ±5% and ¼W.	H401 1 1 1 H402 1 1 1 H403 1 1 1 H404 1 1 1 H405 1 1 1 H406 1 1 1	HT313281T HT313281T HT313282A HT313282A HT313281T HT313281T	Transistor, 2SC1328T Transistor, 2SC1328S,T Transistor, 2SC1328S,T Transistor, 2SC1328T
R402 1 1 1 R403 1 1 R404 1 1 R405 1 R406 1 R407 1 R408 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	RT0582314 RT0582314 RT0547114 RT0547114 RN0539414 RN0539414 RT0522314 RT0522314 RT0582114	82ΚΩ 82ΚΩ 470Ω 470Ω 390ΚΩ 390ΚΩ 22ΚΩ 22ΚΩ	J401   1   1   1   J407   1   1   1   1   1   1   1   1   1	YP1000113 YD2915004	PRE & TONE AMP.CIRCUIT BOARD  —PE01  P.W. Board, Pre & Tone Amp.
R410 1 1	1 1 1 1 1 1 1 1	RT0582114 RN0510414 RN0510414	820Ω 100KΩ	1 1 1	ZZ2915004	(Print Only) P.W. Board Assembly

REF.	QTY.		<i>(</i> .			REF. QTY.			DECORIDATION		
DESIG				PART NO.	DESCRIPTION	DESIG	U.	С	E	PART NO.	DESCRIPTION
RE01 RE02 RE03 RE04 RE05	1 1 1	11111	1 1 1 1 1	RT0547414 RT0547414 RT0539114 RT0539114 RN0510514	470ΚΩ 390Ω 390Ω 1ΜΩ	CE03 CE04 CE05 CE06 CE07 CE08 CE09 CE10	1 1 1 1 1	1 1 1 1 1 1 1	1 1 1 1 1 1 1	EA1060359 EA1060359 EE4750251 EE4750251 DD1610101 DD1610101 DF1622205 DF1622205	Electrolytic, $10\mu\text{F} + 100\%, -10\%, 35\text{V}$ Electrolytic, $10\mu\text{F} + 100\%, -10\%, 35\text{V}$ Electrolytic, $4.7\mu\text{F} \pm 20\%, 25\text{V}$ Electrolytic, $4.7\mu\text{F} \pm 20\%, 25\text{V}$ Ceramic, $100\text{FF} \pm 10\%, 50\text{V}$ Ceramic, $100\text{FF} \pm 10\%, 50\text{V}$ Film $2200\mu\text{F} \pm 10\%, 50\text{V}$ Film, $2200\mu\text{F} \pm 10\%, 50\text{V}$
RE06 RE07 RE08 RE09 RE10 RE11 RE12 RE13 RE14	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	RN0510514 RN0510414 RT0510314 RT0527314 RT0527314 RT0510214 RT05510214 RT05510214 RT05510214 RT0510214	100ΚΩ 10ΚΩ 27ΚΩ 27ΚΩ 1ΚΩ 1ΚΩ 5.1ΚΩ 5.1ΚΩ	CE11 CE12 CE13 CE14 CE15 CE16 CE17 CE18 CE19 CE20	1 1 1 1 1 1 1	i	1 1 1 1 1 1 1 1	DF1668205 DF1668205 DF1622305 DF1622305 DF1622305 DF1622305 DF1610305 DF1610305 EE1050501	Film, 0.022µF ±10%, 50V
RE16 RE17 RE18 RE19 RE20	1 1 1	1 1 1 1		RT0510214 RT0547414 RT0547414 RT0556214 RT0556214	470ΚΩ 470ΚΩ 5.6ΚΩ 5.6ΚΩ	CE21 CE22 CE23 CE24 CE25	1	1 1 1 1	1 1 1 1	EE3350501 EE3350501 EQ1050501 EQ1050501 EA2270359	Electrolytic, $33\mu F \pm 20\%$ , 50V Electrolytic, $33\mu F \pm 20\%$ , 50V Electrolytic, $1\mu F \pm 30\%$ , 50V Electrolytic, $1\mu F \pm 30\%$ , 50V Electrolytic, $220\mu F + 100\%$ , $-10\%$ , 35V
RE21 RE22 RE23 RE24 RE25 RE26 RE27 RE28 RE29 RE30	1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1	RT0512314 RT0512314 RT0515414 RT0515414 RT0556214 RT0556214 RT0556214 RT0556214 RT0527314 RT0527314	12ΚΩ 150ΚΩ 150ΚΩ 5.6ΚΩ 5.6ΚΩ 5.6ΚΩ 5.6ΚΩ 27ΚΩ	HE01 HE02 HE03 HE04 HE05 HE06 HE07 HE08	1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1 1 1	HT313283A HT107632A HT107632A	Transistor, 2SC1328 S,T,U Transistor, 2SC1328 S,T,U Transistor, 2SA763 4.5
RE31 RE32 RE33 RE34 RE35	1 1 1 1	1 1 1 1 1	1 1 1 1 1	RT0512314 RT0512314 RT0515314 RT0515314 RT0547414	12ΚΩ 15ΚΩ 15ΚΩ 470ΚΩ	JE01	1	1	1	YP1000113	Plug
RE36 RE37 RE38 RE39 RE40	1 1 1	1 1 1 1	1 1 1 1	RT0547414 RT0527314 RT0527314 RT0522514 RT0522514	27ΚΩ 27ΚΩ 2.2MΩ	P700	1	1	1	YD2890004 ZZ2927204	MAIN AMP.CIRCUIT BOARD-P700 P.W. Board, Main Amp.(Print Only) P.W. Board Assembly P700-RESISTORS
RE41 RE42 RE43 RE44 RE45 RE46 RE47 RE48 RE49	1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	RT0568314 RT0568314 RT0547314 RT0547314 RT0510314 RT0510314 RT0522114 RT0522114 RT0547414	68ΚΩ 47ΚΩ 47ΚΩ 10ΚΩ 10ΚΩ 220Ω 220Ω 470ΚΩ	R701 R702 R703 R704 R705 R706 R707 R708	1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1 1 1	RT0520214 RT0520214 RT0533314 RT0533314 RT0568214 RT0568214 RT0510214 RT0510214 RT0556314	All resistors are $\pm 5\%$ and $\%W$ , unless otherwise indicated. $2K\Omega$ $2K\Omega$ $33K\Omega$ $33K\Omega$ $6.8K\Omega$ $6.8K\Omega$ $1K\Omega$
RE51 RE52 RE53 RE54 RE55	1 1 1	1 1 1 1	1 1 1 1	RM0104005 RM0104005 RM0104005 RT0582114 RC0000012	Variable, $100 \mathrm{K}\Omega(\mathrm{B})\mathrm{Mid}$ Variable, $100 \mathrm{K}\Omega(\mathrm{B})\mathrm{Low}$ $820 \Omega$	R710 R711 R712 R713 R714	1 1 1 1 1	1 1 1 1	1 1 1 1 1	RT0556314 RT0547214 RT0547214 RA0502017 RA0502017	$\begin{array}{lll} 56 K \Omega & & & \\ 4.7 K \Omega & & & \\ 4.7 K \Omega & & & \\ Trimming, & 5 K \Omega & (B) & \\ Trimming, & 5 K \Omega & (B) & & \\ \end{array}$
CE01 CE02		1	1	DF1722405 DF1722405	PE01-CAPACITORS Film, 0.22μF ±20%, 50V Film, 0.22μF ±20%, 50V	R715 R716 R717	1	1 1 1	1 1 1	RT0515414 RT0515414 RT0520214	150ΚΩ 150ΚΩ 2ΚΩ

REF. DESIG	-	C	Е	PART NO.	DESCRIPTION	REF. DESIG.		C	Е	PART NO.	DESCRIPTION
R718	1	1	1.	RT0520214	2ΚΩ	C712		1	1	EE4760162	Electrolytic, 47μF ±20%, 16V
R719	1	1	1	RT0533314		C713	1	1	1		Electrolytic, 220µF+50%,-10%,50V
R720		1	1	RT0533314		C714	1	1	1	ED2270509	Electrolytic, 220μF+50%,-10%,50V
						C719	3	1	1	DK1610150	
R721	1	1	1	GF0510212		C720	1	1	1	DK1610150	
R722	1	1	1	RT0524214		C721	1	1	1	DF1710452	
R723	1	1	1	RT0524214		C722	1	1	1	DF1710452	1
R724	1 .	1	1	RT0547214 RT0547214		C725 C726		1	1	DF1610205 DF1610205	
R725	1	1	1	RT0522114	i	0720	١.	'	٠,	DI 1010203	0.00 (41 1 10/0)00 1
R729	1	1	1	RT0522114							P700-SEMICONDUCTORS
R730	1	1	1	GF0533014		H701	1	1	1	HT107631B	Transistor, 2SA763 4.5
R731	1	1	1	GF0533014	33Ω	H702	1	1	1	HT107631B	
R732	1	1	1	GF0543114	430Ω	H703	1	1	1	HT107631B	
						H704	3	1	1	HT107631B	
R733		1	1	GF0543114		H705		1 1	1	HT308753B HT308753B	
R734		1	1	GF0527114 GF0527114	1	H707	4	1	1	HT309451Q	
R735	E	1	1	GF0527114 GF0524214	1	H708	1 .	1	1	HT309451Q	1
R737		1	1	GF0524214	1	H709	1	1	1	HT107331Q	
R738	1	1	1	GF0527214		H710	1	1	1	HT107331Q	Transistor, 2SA733 Q
R739	1	1	1	GF0527214							
R740	1	1	1	GF0533214	3.3ΚΩ	H711	1	1	1	HT309591L	
R741	1	1	1	GF0533214	:	H712	1	1	1	HT309591L	
R742	1	1	1	GF0510114	100Ω	H713	1	1 1	1	HT106061L HT106061L	
1				050540444	1000	H715	1	1	1	HD3003009	
R743	1	1	1	GF0510114 GF0510114		H716		1	1	HV0000312	
R744 R745	1	1	1	GF0510114	1	H717	1	1	1	HV0000312	1
R746	1	1	1	GJ0510002	10Ω ±5%, 2W	H718	1	1	1	HD2000221	
R747	5	1	1	GJ0510002	10Ω ±5%, 2W	H719	1	1	1	HD2000221	
R748	1	1	4	GF0510014	$10\Omega$	H720	1	1	1	HT307351C	Transistor, 2SC735 Y
R749	1	1	1	GF0510014		11704				UT2072E10	Transistor, 2SC735 Y
R750	1 .	1	1	GF0522112	220Ω ±5%, ½W	H721 H722		1	1	HT307351C HD2000221	
R751	1	1	1	GF0522112	220Ω ± 5%, ½W 220Ω ±5%, ½W	H723		1	1	HD2000221	1
R752	1	1	1	GF0522112	220Ω ±5%, ½W	H724	1	1	1	HD2000221	
R753	1	1	1	GF0522112	220Ω ±5%, ½W	H725	1	1	1	HD2000221	l
R754	1	1	1	GF0510014		H727	1	1	1	HH0000812	Thermistor, 21 D 28
R755	1	1	1	GF0510014	10Ω	H728	1	1	1	HH0000812	Thermistor, 21 D 28
R756	1	1	1	GX1022203		l					D=00 14/005/ 1 11/50/10
R757		1	1	GX1022203		1 701	1	1	1	LC2272001	P700-MISCELLANEOUS Coil, 2.7µH
R758		1	1	GX1022203		L701		1	1	LC2272001	Coil, 2.7µH
R759 R760	1	1	1	GX1022203 RC1039212		1 2,02			1	LO22/2001	2.7,2.1
R761	1	1	1	RC1039212	1	J701					
R762		1	1	GF0522014		₹ .	1	1	1	YP1000113	Plug
1	ľ		-			J730			İ		
R763	1	1	1	GF0522014	•				ļ		
R764	1	1	1	RC1002212							
R765	1	1	1	RC1002212	1						POWER SUPPLY CIRCUIT BOARD-
R766	1	1	1	RA0201005	I						P800
R767	1	1	1	RA0201005	Trimming, $200\Omega(B)$	P800	1	1	1	YD2916002	P.W. Board, Power Supply (Print Only)
	-				P700-CAPACITORS		1	1	1		P.W. Board Assembly
C701	1	1	1	EE3350251							
C702	1	1	1	EE3350251	Electrolytic, 3.3µF ±20%, 25V						P800-RESISTORS
C703	1	1	1	DD1620101		R801		1	1		10Ω ±5%, ½W
C704	1.	1	1	DD1620101		R802	1	1	1		4.7KΩ±5%, ¼W
C705	1	1	1	EA1060359		R803	1 1	1	1		4.7KΩ±5%, ¼W  3.9KΩ±5%, ¼W
C707	1	1	1	DD1003050	l a constant and a co	R805		1	1		22KΩ ±5%, ¼W
C708	1	1	1	DD1003050	I	R806		1	1	RA0502013	
C709	1	1	1	EA4760509 EA4760509	Electrolytic, $47\mu\text{F}+100\%$ , $-10\%$ ,50V Electrolytic, $47\mu\text{F}+100\%$ , $-10\%$ ,50V	R807	: 1	1	1		150Ω ±10%, 5W
C711	1	1	1	EE4760162	Electrolytic, 47µF +100%, -10%, 50 V	R808	) 1	1	1	RT0533214	3.3KΩ±5%, ¼W
1 3/11		•				R809	1 [	1	1		10Ω ±5%, ¼W
						R810	1	1	1	HT0518314	18KΩ ±5%, ¼W
						1					
L				THE RESERVE OF THE PERSON NAMED IN COLUMN TWO		L		لــــا			

REF. DESIG.		C	Е	PART NO.	DESCRIPTION	REF.	U	C	′. E	PART NO.	DESCRIPTION
R811 R812		1	1		15KΩ ±5%, ¼W 6.8KΩ ±5%, ¼W	L004 L004	1	1	1	TS1960213 TS1960214	Power Transf., UL, CSA Power Transf.,
R813		1	1		240KΩ±5%, ¼W						•
R814		1	1		39KΩ ±5%, ¼W	H001	1	1	1	HT308971B	Transistor, 2SC897 B, C
R815		1	1		470Ω ±5%, ½W	H002	1	1	1	HT308971B	Transistor, 2SC897 B, C
R816	1	1	1		5.6KΩ ±5%, ½W	H003	1	1	1	HT107571B	
R817	1	1	1	GU0556212	5.6KΩ ±5%, ½W	H004	1	1	1 1	HT107571B	
R818	1	1	1	RT0556214	5.6KΩ ±5%, ¼W	H005	1	1	1	HV0000308	
						H006	1	1	1 1	HV0000308	
					P800-CAPACITORS	H007	1	1	1	HD2000510	
C801	1	1	1	EA2270631		H008	1	1	1	HD2001105	Diode, 1S1555
C802	1	1	1	EA1070509	1	5002	1	1	1	SR1005008	Rotary Switch, Selector
C803	1	1	1	DK1810351	1	S002	1	1	1	SP0201015	Power Switch
C805	1	1	1		Electrolytic, 22μF, 35V Electrolytic, 330μF, 50V	0001	1	1	•	31 0201013	Tower Switch
C806	1	1	1		Electrolytic, 470μF, 16V	F001	1	1		FS1040005	Fuse, 4A, MGC
C807	1	1	1		Electrolytic, 4.7 µF, 50V	F002	1	1		FS2050090	, ,
C808	1	1	1		Electrolytic, 47 µF, 16V						
C809	1	1	1		Electrolytic, 220µF, 10V	W001	1	1		YC0240010	AC Cord
C810	1	1	1	DK1810351		W001			1	YC0190003	AC Cord
					P800-SEMICONDUCTORS	J001	1	1	1	YT0204008	1
H801		1	1	HT403302A		J002	1	1	1	YT0208006	1
H802		1	1	HT313183A		J003 J004	1	1	1	YT0201009 YT0204011	Terminal, 1P, Pin Jack Terminal, 4P, Pin Jack
H803		1 1	1	HT309452A HT403314A		J004	1	1	1	YT0304006	
H805	1	1	1	HT309452A		J007	1	1	1	YT0304006	
H806	1	1	1	HT313182R		J008	1	1	1	YJ0400048	Jack, AC Outlet
H807		1	1	HT313182R		J009	1	1	1	YJ0400048	Jack, AC Outlet
H808	1	1	1	HD2001103		J010	1	1		YJ0800012	Socket, Fuse Holder
H809	1	1	1	HD3002309	•	J011	1	1	1	YJ0100081	Socket, DUBBING IN
H810	1	1	1	HD3002709	Diode, WZ-140	1012			,	V 10100000	Cooket DUDDING OUT
				1100004400	Diada DC121D	J012 J013	1	1	1	YJ0100098 YJ0100098	Socket, DUBBING OUT Headphone
H811 H812	1	1	1	HD2001103 HD2000321	•	J014	1	1	1	YJ0500020	Socket, Transistor
11012	•	'	1	1102000321	Diode , 132471	J015	1	1	1	YJ0500020	Socket, Transistor
					P800-MISCELLANEOUS	J016	1	1	1	YJ0500020	Socket, Transistor
L801	1	1	1	LY2024006		J017	1	1	1	YJ0500020	Socket, Transistor
					A Part of the Control	J018	1	1	1	YL0103018	
J801			- 1	·		J019	1	1	1	YT0101003	Terminal, Chassis Ground
} }	1	1	1	YP1000113	Plug	J020	1	1	1	YJ0800019	Socket, Lamp
J810						J021			1	YL0106004	Terminal, Voltage Conversion
					GENERAL MISCELLANEOUS						
R001	1	1	1	RS0504002	Variable Resistor, BALANCE						
R002		1	1		Variable Resistor, VOLUME						FUSE CIRCUIT BOARD-PR01
R003			- 1		Resistor, $2.2M\Omega \pm 10\%$ , ½W	PR01				YD2871003	P.W. Board, Fuse (Print Only)
R004		1	1	GF0515112					1	ZZ2871803	P.W. Board Assembly
.R005	1	1	1	RT0520214	Resistor, $2K\Omega$ $\pm 5\%$ , $4W$	1					PR01-MISCELLANEOUS
C001	1	1	1	EC1090502	Electrolytic Cap,, 10,000µF, 50V	JR01			1	YJ0800020	Jack
C002	1	1	1		Electrolytic Cap., 10,000µF, 50V	JR02			1	YJ0800020	Jack
C003	1	1	1		Ceramic Cap., 0.01µF ±20%,50V	JR03			1	YJ0800020	Jack
C004	1	1	1	DK1710301	Ceramic Cap., 0.01µF ±20%,50V	JR04			1	YJ0800020	Jack
C005	1	1	1	DK1840301	Ceramic Cap., $0.04\mu\text{F}$ , $50\text{V}$	JR05			1	YJ0800020	Jack
C006			1	DF1722380	Film Cap., 0.022µF ±20%,1000V	JR06			1	YJ0800020	Jack
C007	1	1	1	DK1810351	Ceramic Cap., 0.01µF ±20%,500V	JR07			1	YJ0800020	Jack
G001	1	1		BF1040003	Printed Comp.	JR08			1	YJ0800020	Jack Plug
3001	•	•		51 1040003	Timed Comp.	JR09 JR10			1	YP1000099 YP1000099	Plug Plug
M001	1	1	1	IM1104208	Meter, AM/FM	3					
M002		1	1	IN1008030	Lamp, Pointer	JR11			1	YP1000099	Plug
M003		1	1	IN1008034	Lamp, Stereo Indicator	JR12			1	YP1000099	Plug
M004	1	1	1	IN1008007	Lamp, Meter	JR13			1	YP1000099	Plug
1,000				1 54466666	A O-11 ANA	JR14			1		Plug
L001	1	1	1	LF1120038	Antenna Coil, AM	JR15			1	YP1000099	Plug
L002		1	1	LC1332002 LC1332002	Choke Coil 3.3µH Choke Coil 3.3µH	JR16			1	YP1000099	Plug
L003	•	'	1	LC1032002	Choke our Glowin					,	
			-								
•											

REF. QTY.	PART NO.	DESCRIPTION
FR01 1 FR02 1 FR03 1 FR04 1	FS1040090 FS1010090 FS1010090 FS1040090	Fuse, 4A, SGA Fuse, 1A, SGA Fuse, 1A, SGA Fuse, 4A, SGA



# 11. TECHNICAL SPECIFICATIONS

AMPLIFIER SECTION Rated Power Output35 Watts per channel, continuous average power, both channels driven. Power Band
PREAMPLIFIER SECTION Phono:
Dynamic Range
Equivalent Input Noise
Phono
Tape 180 mV
Main In
Phono
Aux or Tape
Main In
Ref.: 7.75 mV at phono input
Signal to Noise Ratio
Aux Input80 dB
Phono Input
Bass: 50 Hz±10 dB
Mid: 700 Hz±6 dB
Treble: 15 kHz±10 dB
FM TUNER SECTION
Quieting Slope
RF Input for 30 dB Quieting
Quieting at $5\mu V$ RF Input
Quieting at 10 $\mu$ V RF Input
Total Harmonic Distortion
Mono:
Stereo:
Selectivity (alternate carrier)
Capture Ratio
Spurious Rejection
Image Rejection70 dB
IF Rejection
AM Suppression50 dB
AM TUNER SECTION
Sensitivity

# GENERAL Power Requirements 120 V AC, 50/60 Hz Power Consumption at rated output, both channels operating 180 Watts Idling Power (Volume Control at zero) 30 Watts Dimensions: Panel Width 17-3/8 inches Panel Height 5-3/8 inches Depth 14 inches Weight: Unit alone 26.4 lbs. Packed for shipment 36.4 lbs.



# 12. SERVICE INFORMATION FOR EUROPEAN MODEL

The information contained herein includes the fuse assembly PR01, rear panel and main chassis component locations, voltage conversion, FTZ regulation, and circuit diagram.

For the alignment method and repairing hints, refer to the original service manual.

### TABLE OF CONTENTS

PR01 Circuit Diagram	39
Fuse Board—PR01 Component Assembly Diagram	39
Rear Panel Jacks and Component Locations '	40
Main Chassis Component Locations (Bottom View)	40
Voltage Conversion	41
Voltage Conversion Chart	41
FTZ Regulation	41
Circuit Diagram	43
Technical Specifications	45



Figure 39. PR01 Circuit Diagram

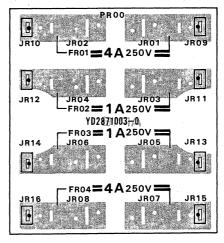


Figure 40. Fuse Board — PR01 Component Assembly Diagram

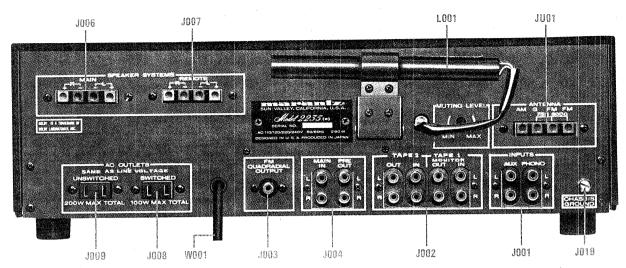


Figure 41. Rear Panel Jacks and Component Locations

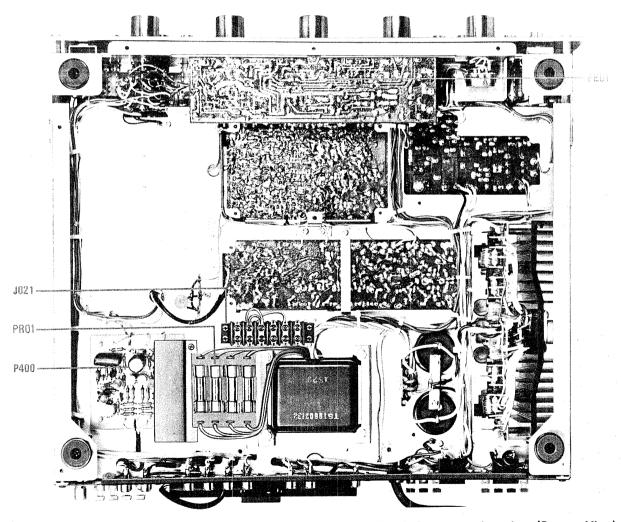


Figure 42. Main Chassis Component Locations (Bottom View)

### main renutz

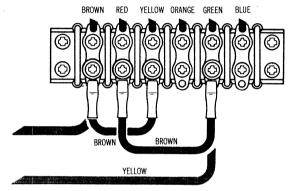
### **VOLTAGE CONVERSION**

This model is equipped with a universal power transformer to permit operation at 110, 120, 220 and 240 V AC 50 to 60 Hz.

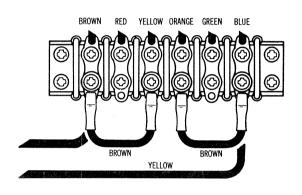
To convert the unit to the required voltage perform the following steps:

- (1) Remove the lid (top).
- (2) Change the jumper wires as illustrated below for the required AC voltage.

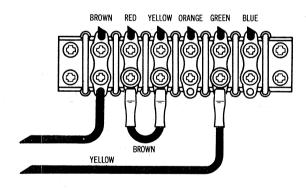
CAUTION: DISCONNECT POWER SUPPLY CORD FROM AC OUTLET BEFORE CON-VERTING VOLTAGE.



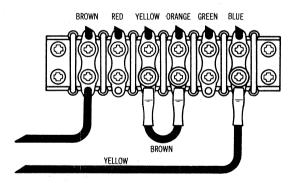
For 110V Operation



For 120V Operation



For 220V Operation



For 240V Operation

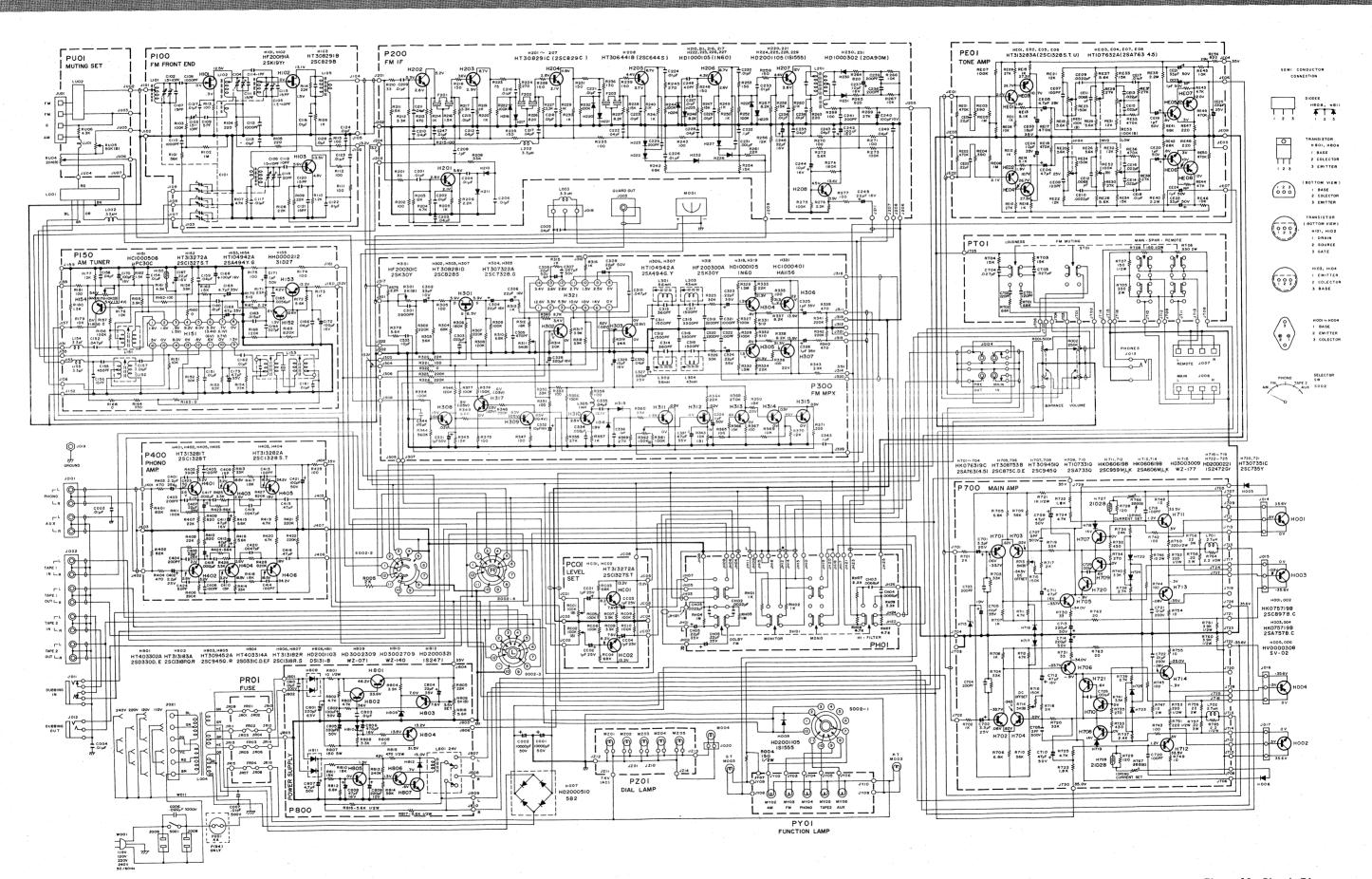
Figure 43. Voltage Conversion Chart

### FTZ REGULATION

Instruction for the use in the range other than specified in FTZ codes

Achtung für die Leute, die in dem Gebiet wohnen, wo die FTZ-Bestimmungen vorherrschend sind.

Sollte das Gerät auch für Frequenzen auszerhalb des in den FTZ-Bestimmungen angegebenen Bereiches empfangebereit sein, bitten wir, den Bereich durch Nachstellen des Kernes in der Oszillatorspule (in der Abbildung mit "FTZ" gekennzeichnet) so zu korrigieren, dass er den Bestimmungen entspricht.



MODEL 2235 NOTE: This circuit diagram applies to units manufactured for the European Market.

Figure 44. Circuit Diagram

# TECHNICAL SPECIFICATIONS

AMPLIFIER SECTION  Rated Power Output 35 Watts per channel, continuous average power, both channels driver
Power Band 20 Hz to 20 kH
Total Harmonic Distortion
Intermodulation Distortion at rated power
Damping Factor
Frequency Response
PREAMPLIFIER SECTION
Phono:  Dynamic Range
Note: Dynamic Range is the ratio in dB of the phono input overload to equivalent input noise
Equivalent Input Noise
Input Overload
Sensitivities (for rated power output)  Phono
Tape
Main In
Frequency Response (phono)
Input Impedances
Phono
Aux or Tape
Tape Output Level
Ref.: 7.75 mV at phono input
Signal to Noise Ratio
Aux Input 80 dl
Phono Input
Bass: 50 Hz ±10 d
Mid: 700 Hz
Treble: 15 kHz ±10 d
THE THEFT OF OTION
FM TUNER SECTION Sensitivity (DIN)
Outsting Clans
RF Input for 30 dB Quieting
Quieting at $5\mu V$ RF Input
Quieting at 10 $\mu$ V RF Input
Quieting at 50 µV RF Input
Total Harmonic Distortion  Mono:
Stereo:
Selectivity (alternate carrier)
Capture Ratio
Stereo Separation at 1 kHz
Image Rejection
IF Rejection
AM Suppression 50 d
ANA TUNED CECTION
AM TUNER SECTION Sensitivity
Octisitivity

GENERAL	
Power Requirements	
Power Consumption at rated output, both channels operation	180 Watts
Idling Power (Volume Control at zero)	30 Watts
Dimensions:	
Panel Width	440 mm
Panel Height	
Depth	356 mm
Weight:	
Unit alone	10.5 kg
Packed for shipment	13.5 kg